A Strategy for Resolving Europe's Problem Loans[1]

TECHNICAL BACKGROUND NOTES

September 2015

[1] Prepared by a staff team from EUR, MCM and LEG departments, including Shekhar Aiyar (EUR), Wolfgang Bergthaler (LEG), Jose M. Garrido (LEG), Anna Ilyina (EUR), Andreas (Andy) Jobst (EUR), Kenneth Kang (EUR), Dmitriy Kovtun (EUR), Yan Liu (LEG), Dermot Monaghan (MCM), Marina Moretti (MCM), Pamela Madrid (EUR), Pablo Lopez-Murphy (EUR), Jiri Podpiera (EUR), Jean Portier (MCM), Yan Sun (EUR) and Oliver Wuensch (MCM).

CONTENTS

I. THE EU DEFINITION OF NPLS ____ 4

II. CREDIT GROWTH DETERMINANTS IN CESEE ____ 7

III. MACRO-FINANCIAL EFFECTS OF HIGH NPLS ____ 8

IV. THE IMPACT OF CORPORATE LEVERAGE ON INVESTMENT AND EMPLOYMENT ____ 11

V. CAPITAL RELIEF AND NEW LENDING CAPACITY FROM NPL DISPOSAL ____ 13

VI. IMF SURVEY ON OBSTACLES TO NPL RESOLUTION ____ 16

VII. INTEREST ACCRUAL ON NPLS ____ 24

VIII. THE REGULATORY TREATMENT OF NPLS IN THE UNITED STATES—EARLY LOSS RECOGNITION ____ 25

IX. BUILDING BLOCKS FOR EFFECTIVE ARREARS MANAGEMENT ____ 26

X. KEY RECENT REFORMS TO INSOLVENCY REGIMES IN SELECTED EUROPEAN COUNTRIES: CORPORATE INSOLVENCY LAW ____ 28

XI. KEY RECENT REFORMS TO INSOLVENCY REGIMES IN SELECTED EUROPEAN COUNTRIES: PERSONAL INSOLVENCY LAW ____ 34

XII. TREATMENT OF PUBLIC CREDITORS' CLAIMS IN CORPORATE DEBT RESTRUCTURING AND INSOLVENCY ____ 37

XIII. CORPORATE LAW OBSTACLES TO REORGANIZATION AND RESTRUCTURING OF FIRMS ____ 38

XIV. COMPARATIVE ANALYSIS OF SELECTED EUROPEAN AND INTERNATIONAL AMC INITIATIVES ____ 39

FIGURES

I.1. EBA's New Definition of Performing and Non-performing Exposures ____ 6
III1: Estimated Impact of NPL Shock on Bank Lending and GDP ____ 9
IV.I Capital Relief using Country-Specific Haircuts ____ 15
VI.1: IMF Survey-based Scores on Obstacles to NPL Resolution: by Country and Area ____ 18
VI.2. IMF Survey-based Scores on Obstacles to NPL Resolution: by Area ____ 19

TABLES

I.1. Classification Criteria for NPLs (percent answering "yes") 5
II.1. Regression Results 7
III.1. Recent Studies on NPLs and Credit/GDP Growth 10
IV.1. Employment and Investment Elasticity to a 10 percent Sales Shock 12
IV. 2. Regression Results 12
V1.1 Obstacles to NPL/Distressed Debt Resolution Related to Information Availability 20
VI.2 Obstacles to NPL/Distressed Debt Resolution Related to Legal Framework 21
VI.3 Obstacles to NPL/Distressed Debt Resolution Related to Supervisory Framework 22
VI.4 Obstacles to NPL/Distressed Debt Resolution Related to Distressed Debt Market, 23

REFERENCES **40**

I. THE EU DEFINITION OF NPLS[1]

1. **NPLs are defined and reported differently across countries as there is no one international standard.** For countries reporting financial soundness indicators (FSIs) to the IMF, the FSI Compilation Guide (IMF, 2006) recommends reporting loans as non-performing when (i) payments of principal and interest are past due by three months (90 days) or more, or (ii) interest payments equal to three months (90 days) interest or more have been capitalized (reinvested into the principal amount), refinanced, or rolled over (that is, payment has been delayed by agreement).[2] In addition, NPLs should also include those loans with payments less than 90 days past due that are recognized as non-performing under national supervisory guidance. Generally, supervisory guidance includes reference to significant financial difficulty of the borrower, bankruptcy and breach of contract; often there are criteria on the treatment of restructured loans. This is in line with international guidance on criteria for identifying and reclassifying a problem asset (Basle Committee on Banking Supervision, Core Principle 18) or criteria for establishing default (Basel II). Nonetheless, there still may be important differences or discretionary aspects in these criteria that make it difficult to compare NPL levels, even among banks in the same country.

2. **European national supervisory authorities tend to use the 90 days of payments past-due as a quantitative threshold as well as bankruptcy as objective criteria for reporting a loan as non-performing.** However, there is less consistency in the other, sometimes more discretionary, criteria used under national supervisory guidance. In particular, restructured loans are not necessarily classified as NPLs (or can be immediately upgraded), while some authorities allow banks to classify past-due loans as performing if there is high-value collateral, guarantees or other risk mitigants (Hulster and others, 2014). This may bias NPL ratios down in some countries. On the other hand, more CESEE than advanced EU countries require all loans to a given debtor to be downgraded if any the debtor's loans is classified as an NPL (i.e., debtor or customer view approach). Among 20 European countries with high aggregate NPL ratios (i.e., above 10 percent as of end-2014), there appears to be less scope for the use of collateral to upgrade loans to performing but also less classification of restructured loans and less use of the debtor approach (Table I.1),

[1] Prepared by Pamela Madrid (EUR).

[2] The 90-day threshold is also used in Basel II and CRD IV definitions of default (although the latter allows for national discretion for 180-day threshold for retail exposures secured by real estate).

Table I.1: Classification Criteria for NPLs (percent answering "yes")

Criteria	26 European countries (WB study)*	20 European countries with high NPLs**
Existence of collateral, guarantees or other credit risk mitigants	83	55
Restructuring	83	60
Customer view (debtor approach)	74	55

Source: World Bank; Barisitz; IMF FSI metadata; IMF staff. Notes: (*) includes emerging market economies (Albania, Bosnia Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Georgia, Kosovo, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Serbia, Slovak Republic, Slovenia), as well as advanced economies (Austria, Denmark, France, Germany, Italy, Greece, Norway and Sweden); (*) includes economies with the peak NPL ratio of over 10 percent during 2008-2014.

3. **In January 2015, the EU adopted harmonized and consistent definitions of both forbearance (i.e., restructuring or refinancing of troubled debt) and nonperforming exposures.**[3] Previously, there were neither comprehensive, harmonized definitions nor specific and detailed supervisory reporting requirements for NPLs. For supervisory reporting purposes, non-performing exposures are now defined as those being (i) material exposures more than 90 days past-due and/or (ii) unlikely to be repaid in full without realization of collateral. Exposure in default or impaired are always to be reported as non-performing, while collateral is not taken into account in the categorization. The debtor approach would apply to non-retail exposures when past-due payments exceed 20 percent of the gross on-balance sheet exposures (and would apply to other companies in the group). When forbearance measures are extended to non-performing exposures these remain classified as NPLs until there is no impairment or default, one year has passed, and there are no past-due amounts or concerns about full repayment according to the post-forbearance conditions. Given that many EU countries with high NPLs tend to have less stringent reporting requirements of restructured loans (or do not require the debtor approach), these countries may see an increase in NPLs.

[3] Commission Implementing Regulation (EU) No. 680/2014 lays down the implementing technical standards submitted by the EBA to the Commission with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council.

Figure I.1. EBA's New Definition of Performing and Non-performing Exposures

Performing

Fully perfoming

Loans and debt securities that are not past-due and without risk of non-repayment and performing off-balance sheet items

Performing assets past due below 90 days

Loans and debt securities between 1-30 days past due

Loans and debt securities between 31-60 days past due

Loans and debt securities between 61-90 days past due

Performing assets that have been renegotiated

Loans and debt securities which renegotiation or refinancing did not qualify as forbearance

Forbearance

Forborne loans and debt securities (and eligible off-balance sheet commitments)

performing or non-performing

Refinancing

Modifications of terms and conditions

Other

Non-performing

Generic criteria: past due more than 90 days and / or unlikely to pay

All other non-defaulted and non-impaired loans and debt securities and off-balance sheet exposures meeting the generic criteria

Defaulted

Fair value option

Impaired

Fair value through other comprehensive income

Amortised cost

off-balance sheet items:

Loan commitments given

Financial guarantees given (except derivatives)

Other commitments given

Source: European Banking Authority (2014).

II. CREDIT GROWTH DETERMINANTS IN CESEE[1]

1. **This section revisits bank-level determinants of credit growth using dynamic panel methods for a sample of banks operating in CESEE countries following earlier studies on credit growth in CESEE countries** (European Banking Coordination Initiative (2012), Klein (2013), IMF (2014))**.** The dataset includes about 450 banks, covering the period of 2000-2014, with an average of 6 years of observations per bank. The findings suggest that bank lending is influenced by both bank-specific characteristics as well as macroeconomic conditions (see Table II.1). In general, higher NPL ratio,[2] low capital-asset ratio, and low pre-tax earnings (in percent of bank's assets) are associated with lower credit growth. The operating environment matters as well: high GDP growth is associated with stronger credit growth because of both improved debt servicing capacity as well as better lending opportunities.

Table II.1 Regression Results

Real Credit Growth	(1)	(2)	(3)	(4)	(5)
Growth in gross loans (in local currency terms), (t-1) %	0.192***	0.225***	0.131*	0.185	0.206**
	(0.0632)	(0.0619)	(0.0758)	(0.118)	(0.0930)
GDP growth	1.114***	1.350***	1.153***	0.850***	1.073***
	(0.248)	(0.268)	(0.250)	(0.247)	(0.276)
GDP growth (t-1)	0.0455	0.0317	0.199	0.111	0.103
	(0.188)	(0.214)	(0.209)	(0.195)	(0.203)
NPL ratio (t-1)	-0.464***	-0.531***	-0.389***	-0.352	-0.355***
	(0.108)	(0.117)	(0.117)	(0.295)	(0.132)
Capital asset ratio (% of beginning period assets)	0.331***			0.382***	
	(0.114)			(0.143)	
Capital asset ratio (% of assets)		0.178			-0.0745
		(0.196)			(0.262)
Pre-tax operating income / Avg. assets %			1.522***	1.028*	1.575***
			(0.439)	(0.617)	(0.437)
Constant	-3.579	0.131	0.384	-8.670*	-0.259
	(3.766)	(3.030)	(2.135)	(5.137)	(4.039)
Observations	1,052	1,052	1,000	793	793
Number of idBS	257	257	278	223	223
Arellano-Bond test for AR(1)	0.000675	0.000338	0.000291	0.00287	0.000922
Arellano-Bond test for AR(2)	0.673	0.637	0.730	0.714	0.693

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Note. Dynamic panel estimation. Instruments used are lags of the independent variable itself, first period lag of NPL, pre-tax income ratio, capital/asset ratio, GDP growth (t-1), and time and country dummies.
Data source: Bankscope, IMF International Financial Statistics.

[1] Prepared by Yan Sun (EUR)

[2] Further refinements of this analysis could include (i) considering capital in excess of the amount that covers net NPLs, and (ii) the un-provisioned part of impaired loans, however, these are unlikely to lead to significantly different results.

III. MACRO-FINANCIAL EFFECTS OF HIGH NPLS[3]

1. **There is extensive literature that explores the impact of macroeconomic conditions on banks' financial soundness indicators** (see Table III.1). Bank default rates tend to follow a cyclical pattern, falling during macroeconomic expansions and rising during downturns (Marcucci and Quagliariello, 2008). There is a significant and negative relation between changes in the output gap and loan write-offs (Hoggarth and others, 2005). Other studies (e.g., Kalirai and Scheicher, 2002) find that banks' asset quality is influenced by the short-term nominal interest rate, industrial production, stock market performance and a business confidence index. Furthermore, banks may respond to rising NPLs by "gambling for resurrection", which leads to further increase in asset impairments, i.e., banks with relatively low capital buffers may choose to increasing the riskiness of their loan portfolios, which lead to further increase in NPLs (Keeton and Morris, 1987).

2. **There is also a growing number of studies showing that high NPLs undermine the capacity of banks to support economic activity.** Deterioration in bank's asset quality raises its cost of capital, resulting in higher lending rates, reduced lending volumes and increased risk aversion (Diawan and Rodrik, 1992; Kashyap and others, 1994; Krosner and others, 2007). A number of recent studies (Table III.1) find a significant negative relation between NPLs and both lending and GDP growth—broadly speaking, a 1 percentage point increase in the ratio of NPL to total loans reduces net lending by around 0.8 percentage points (see Figure III.1). For instance, Espinosa and Prasad (2010) find a strong but short-lived feedback effect from losses in banking sector balance sheets to non-oil growth, using a sample of 80 banks from the Gulf Cooperation Council (GCC) region. In a large panel of advanced economies, Nkusu (2011) documents that rising NPLs are often a result of long-lasting linkages between credit market frictions and macroeconomic performance.[4]

3. **Banks' reduced lending capacity tends to disproportionately affect firms that are most dependent on bank finance.** The effect of asset quality on credit growth also seems more pronounced for firms that are dependent on external financing (Rajan and Zingales, 1998) and for smaller firms with fewer tangible assets that produce less tradable goods (Kannan, 2010). In the case of the latter, lending tends to be inherently riskier due to the frequent absence of a long credit history and/or sufficient (and liquid) collateral. This is borne out by international experience. Inaba and others (2005) find that the deterioration of banks' balance sheets after the burst of the asset price bubble in Japan in the early 1990s hindered investment by firms that

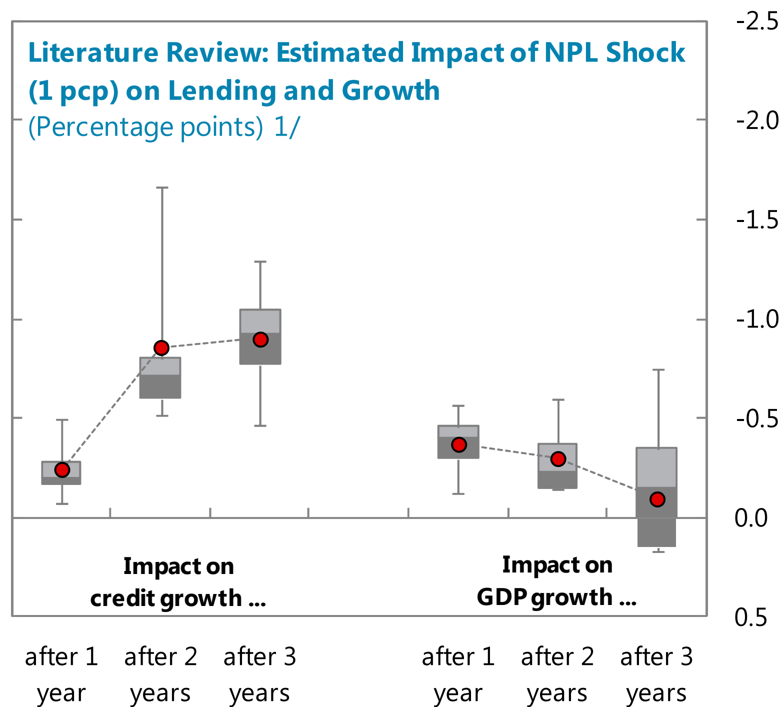
[3] Prepared by Andreas (Andy) Jobst (EUR).

[4] Note that credit-less recoveries are possible but they tend to be more sluggish and shallow compared to normal recoveries that are accompanied by credit growth (Bijsterbosch and Dahlhaus, 2011; Abiad and others, 2011).

relied heavily on bank borrowing. Klein (2013) shows that tight financial conditions for SMEs in Europe have been a drag on the pace of economic recovery.

4. **Persistent NPLs are linked to private sector debt overhang, which depresses the demand for credit.** While some of the decline in lending can be attributed to credit supply factors, it may also be caused by lack of demand for credit. Viable firms may be held back from investment and expansion due to high indebtedness. In the absence of debt restructuring, overextended companies have little incentive to invest because any return is used to service their debt. Based on aggregate firm-level data for 2000-2011 in the euro area periphery, Goretti and Souto (2013) investigate the macroeconomic implications of high corporate debt burden. Their results point to a negative effect of debt overhang on firms' investment.

Figure III.1. Estimated Impact of NPL Shock on Bank Lending and GDP



Sources: Dovern and others (2010), Espinoza and Prasad (2010), Nkusu (2011), De Bock and Demyanets (2012), Klein (2013), Bending and others (2014), and IMF staff calculations. Notes: Positive (negative) values indicate a negative (positive) change in lending/growth. 1/ Boxplots include the mean (red dot), the 25th and 75th percentiles (grey box, with the change of shade indicating the median), and the maximum and minimum (whiskers).

Table III.1. Recent Studies on NPLs and Credit/GDP Growth

Author(s) (Year)	Region/country	Focus	Main finding	Time period	Method
Impact of macroeconomic and financial sector conditions on NPLs					
Keeton and Morris (1987) Gambera (2000) Kent and D'Arcy (2000) Fuentes and Maquieira (2000) Kalirai and Scheicher (2002) Rajan and Dhal (2003) Hoggarth and others (2005) Baboučck and Jančar (2005) Marcucci and Quagliariello (2008)	United States (2,400 banks)/ United States Australia Chile (128) Austria India (public banks only) U.K. Czech Republic Italy (credit register)	Empirical determinants (country-level), <u>single country</u>	Positive linkage between higher credit risk/ default rates and adverse macroeconomic/ business cycle conditions (e.g., disposal income, unemployment, headline inflation, nominal interest rates, business confidence, and equity market returns). Hoggarth and others (2005) also evaluate the dynamics between banks' write-off to loan ratio and several macroeconomic variables.	1979-1985 1987-1999 1890-1999 1960-1997 1990-2001 1993-2003 1985-2004 1988-2004 1993-2006	time series regression, panel regression, reduced form VAR
Duan and others (1992) Salas and Saurina (2002) Breuer (2006) Louzis and others (2011)	Spain U.S. banks (75 listed banks) Italy (credit register) Greece (9 largest banks)	Empirical determinants (bank/country-level), <u>single country</u> 1/	Lending rate, leverage, borrower type, loan category, quality of institutions, and form of banking organization are major determinants of credit risk and rising NPLs.	1975-1989 1998-1999 1985-1997 2003-2009	time series regression, panel regression
Bofondi and Ropele (2011) Beck and others (2013)	52 countries (1,881 banks) 75 countries (both advanced and emerging economies)	Empirical determinants (bank/country-level), <u>multiple countries</u>	Declining real GDP growth has a negative impact on NPLs; depreciation (appreciation) of the domestic currency would lead to a *decline* (increase) in NPLs.	1990-2010 2000-2010	dynamic panel estimation [system GMM]
Feedback effect of NPLs on macroeconomic conditions (lending and growth)					
Dovern and others (2010) Espinoza and Prasad (2010) Nkusu (2011) De Bock and Demyanets (2012) Klein (2013) Bending and others (2014) 3/	Germany 5 GCC countries 26 advanced economies, mostly 25 emerging market countries 16 CESEE countries 16 euro area countries	Empirical determinants (bank/country-level) and macroeconomic feedback of NPLs	NPLs have a negative and significant effect on credit, inflation, and real GDP growth, while contributing to higher unemployment. De Bock and Demyanets (2012) find that the slowdown in economic activity is more pronounced if positive shocks to NPLs are accompanied by a depreciation of the exchange rate and a decline in foreign portfolio inflows. <u>Impact of NPL shock (1 pcp) on lending/GDP growth</u>: ≈-0.4 pcp/n.a. after two years (Dovern and others, 2010), -0.4 pcp after one year/-0.7 pcp after two years (Espinoza and Prasad, 2010), -0.3 pcp/-0.2 pcp after one year (Nkusu, 2011), -0.5 pcp after one year/-1.7 pcp after two years (De Bock and Demyanets, 2012), -0.8 pcp/-0.6 pcp after two years (Klein, 2013), and n.a./-0.8 pcp after two years (Bending and others, 2014).	1968-2007 1995-2008 1998-2009 1996-2010 1998-2011 2004-2013	dynamic panel estimation [system GMM]
Kashyap and others (1994) Kroszner and others (2007)	2,328 U.S. manufacturing companies 38 advanced and emerging market economies	Macro-economic feedback from NPLs only	High NPLs affect banks' capital position and raise their cost of capital, thereby resulting in higher lending rates that contribute to lower credit growth; sectors highly dependent on external finance tend to experience a substantially greater contraction of value added during a banking crisis in deeper financial systems than in countries with shallower financial systems.	1980-1985 1980-2000	panel regression

Note: 1/ Some of these papers also include an analysis of the impact of macroeconomic conditions on loan performance; however, for the organization of the literature, they have been grouped together with papers focusing on the impact of bank-level variables. 2/ Analysis based on write-off rate (reported valued are implied based on about 10 percent write-off rate over the sample period). 3/ Love and Turk (2014) also apply a panel vector autoregression (VAR) approach on a single-country basis only (Egyptian banking sector).

IV. THE IMPACT OF CORPORATE LEVERAGE ON INVESTMENT AND EMPLOYMENT[1]

1. **This section examines how financial leverage affects the elasticity of firm-level investment and employment to a sales shock.** It extends the approach used by Sharpe (1994) and Heisz and LaRochelle-Cote (2004), which involves estimating the impact of changing sales on employment, conditional on the level of leverage, by (i) allowing for a differentiated impact of leverage under positive and negative sales shocks, and (ii) applying this approach to both employment and net investment. The regression model for a firm i is as follows:

$$\Delta Y_{i,t} = \alpha_i \Delta S_{i,t} + \beta^+ \Delta S^+_{i,t} * L_{i,t-2} + \beta^- \Delta S^-_{i,t} * L_{i,t-2} + \gamma \Delta S_{i,t} A_{i,t-2} + \delta L_{i,t-2} + \theta A_{i,t-2} + \varepsilon_{i,t}$$

where ΔY represents alternatively growth of employment or net investment, ΔS is firm's growth of sales, L stands for leverage (measured as debt-to-total assets ratio), A for total assets, and α, β, γ, δ, and θ are parameters. Structural variables are lagged by two years to minimize endogeneity. The model is estimated using firm-level annual data (2005-2013) from the ORBIS database for countries with high NPL ratios (above 10 percent at peak). The sample includes Cyprus, Spain, Greece, Ireland, Italy, Portugal (all euro area), as well as Iceland, Croatia, Bulgaria, Hungary, Latvia, Lithuania, Serbia, and Slovenia (selected CESEE countries).

2. **Results suggest that higher leverage reduces employment and investment growth in upturns and accelerates their declines in downturns.** A decline in sales generally leads to cuts in employment and investment and vice versa. The extent of decline/increase in employment or net investment, however, depends on how leveraged the firms are (Table 1):

- *Higher leverage reduces the elasticity of employment and net investment to positive sales shocks.* In response to a 10 percent increase in sales, high-leverage firms (150 percent of debt-to-asset ratio) increase employment by 1.1 percent, while firms with low or no leverage increase employment by 1.6 percent. In response to the same positive sales shock, high-leverage firms cut investment between 9 and 12 percent (which can be interpreted as continued reduction in capital expenditures regardless of the positive developments in sales), while firms with low or no leverage increase net investment by up to 3 percent, on average.

- *Higher leverage exacerbates cutbacks in employment and net investment in response to declining sales*. The elasticity of employment and investment to a 10 percent negative sales shock increases with the level of leverage (see Table IV.2) from 1.5 at low leverage to 1.6 at high leverage in the case of employment and from 2.8 to 10 in the case of net investment.

[1] Prepared by Jiri Podpiera (EUR).

Table IV.1. Employment and Investment Response to a 10 percent Sales Shock (in percent)

	Positive shock		Negative shock	
	Employment	Investment	Employment	Investment
Leverage (debt to total assets)				
Low (0-10 percent)	1.5-1.6	2.6-3.0	1.5-1.6	2.6-3.0
Medium (30 percent)	1.4-1.5	0-0.2	1.5-1.6	3.8-4.8
High (150 percent)	1.1-1.1	-9.4-(-12.0)	1.6-1.7	8.9-11.8

Source: IMF staff calculations, based on Table IV.2.
Note: Results for the sample that includes euro area countries (Cyprus, Spain, Greece, Ireland, Italy, and Portugal) and Iceland are in red.

The estimation results are presented below:

Table IV.2. Regression Results

	Selected Euro Area [1/] and CESEE countries [2/] and Iceland		Selected Euro Area countries [1/] and Iceland	
	Employment growth	Investment growth[3/]	Employment growth	Investment growth[3/]
Lagged dependent variable	-0.260***	-0.562***	-0.282***	-0.568***
	(0.001)	(0.001)	(0.001)	(0.001)
Change in sales	0.155***	0.257***	0.147***	0.254***
	(0.000)	(0.077)	(0.000)	(0.087)
Change in sales^{+} x leverage $_{t-2}$	-0.029***	-0.896***	-0.025***	-1.009***
	(0.001)	(0.221)	(0.001)	(0.239)
Change in sales^{-} x leverage $_{t-2}$	0.011***	0.425*	0.006***	0.585**
	(0.001)	(0.228)	(0.001)	(0.249)
Change in sales x total assets $_{t-2}$	-0.000***	-0.000*	-0.000***	-0.000*
	(0.000)	(0.000)	(0.000)	(0.000)
Total assets $_{t-2}$	-0.000***	0.000	-0.000***	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Leverage $_{t-2}$	0.004***	0.438**	0.004***	0.548**
	(0.001)	(0.217)	(0.001)	(0.236)
Constant	-0.014***	-1.259***	-0.018***	-1.299***
	(0.000)	(0.058)	(0.000)	(0.065)
Observations	4,504,893	5,292,963	3,616,545	4,648,142
R-squared	0.11	0.23	0.12	0.23
Number of companies	1,422,218	1,499,190	1,132,501	1,281,032

Note: Estimated using fixed effects; Standard errors in parentheses; Stars denote significance: *** p<0.01, ** p<0.05, * p<0.1.
[1/] Selected Euro Area - Cyprus, Spain, Greece, Ireland, Italy, and Portugal;
[2/] Selected CESEE - Croatia, Bulgaria, Hungary, Latvia, Lithuania, Serbia, and Slovenia.
[3/] Investment growth is calculated as $\Delta I_t/I_{t-1}$, where I_t is net investment derived from the change in fixed assets.
Source: Orbis and IMF staff calculations.

V. CAPITAL RELIEF AND NEW LENDING CAPACITY FROM NPL DISPOSAL[1]

1. **The market price of NPLs typically reflects several factors, such as the effectiveness of the insolvency regime and the rate of return demanded by investors.** In this exercise, we assume that banks reduce the current stock of NPLs (end-2014) by selling their distressed loans to external investors. This reduces the regulatory capital charge of their loan book in proportion to the share of (partially provisioned) NPLs (and their applicable credit risk weight). The market price reflects the expected time to recover the residual value of distressed assets (being lower where foreclosure times are longer and debt enforcement regimes weaker) and the expected return on investment consistent with general profit expectations in distressed debt markets.

2. **A shortfall of the market price below the net book value of NPLs is commonly referred to as the "pricing gap" (which can also be expressed as a "haircut" on the net book value).** The sale of loans results in a loss (gain) on disposal and reduces (increases) capital if the selling price lies below (above) the net book value (i.e., the gross value of NPLs after deducting the current level of specific loan loss reserves). Depending on provisioning levels, the effectiveness of the insolvency regime, and the return expectations of investors on the market prices of NPLs, the "pricing gap" can vary significantly across countries.

3. **A realistic calculation of the "pricing gap" requires a detailed assessment of the robustness of loan loss provisions and of the various factors affecting the market price of NPLs.** In the main text of the SDN, Figure 4 presents the results of a simplified calculation, where the "pricing gap" is either (i) assumed to be zero (i.e., the selling price equates to the net book value of NPLs) or (ii) applied uniformly (via a standard haircut) without taking into account country-specific factors. In a more granular exercise, the uniform haircut is replaced with country-specific haircuts that account for the uneven distribution and different credit risk-weightings of NPLs across countries and reflects both the return expectations of external investors and lower asset recovery under inefficient debt enforcement regimes. Thus, the selling price of NPLs represents the reported net loan value less the country-specific haircut, and is calculated as the net present value of the loan after accounting for the usual servicing/legal fees and management costs (of 10 and 2 percent, respectively). We assume that the unsecured portion of each loan (20 percent of the principal value) is fully provisioned and the secured portion depreciates at the expected return of distressed debt investors (10 percent p.a.), with the collateral deteriorating by 5 percent. The calculation for a principal loan value at unity can be expressed as

$$S = 1 - [0.2(1 - r_c) + (0.8e^{-rt} - M)/0.8]$$

[1] Prepared by Andreas (Andy) Jobst (EUR), Jean Portier, and Luca Sanfilippo (both MCM).

where S is the market (selling) price of the distressed loan, *M* are the servicing/legal fees and management costs (as a percent of the principal value), *r* represents the assumed discount rate (equivalent to the internal rate of return (IRR) of 10 percent commonly expected by distressed investors), r_c is the rate of collateral decay and time *t* in number of years.

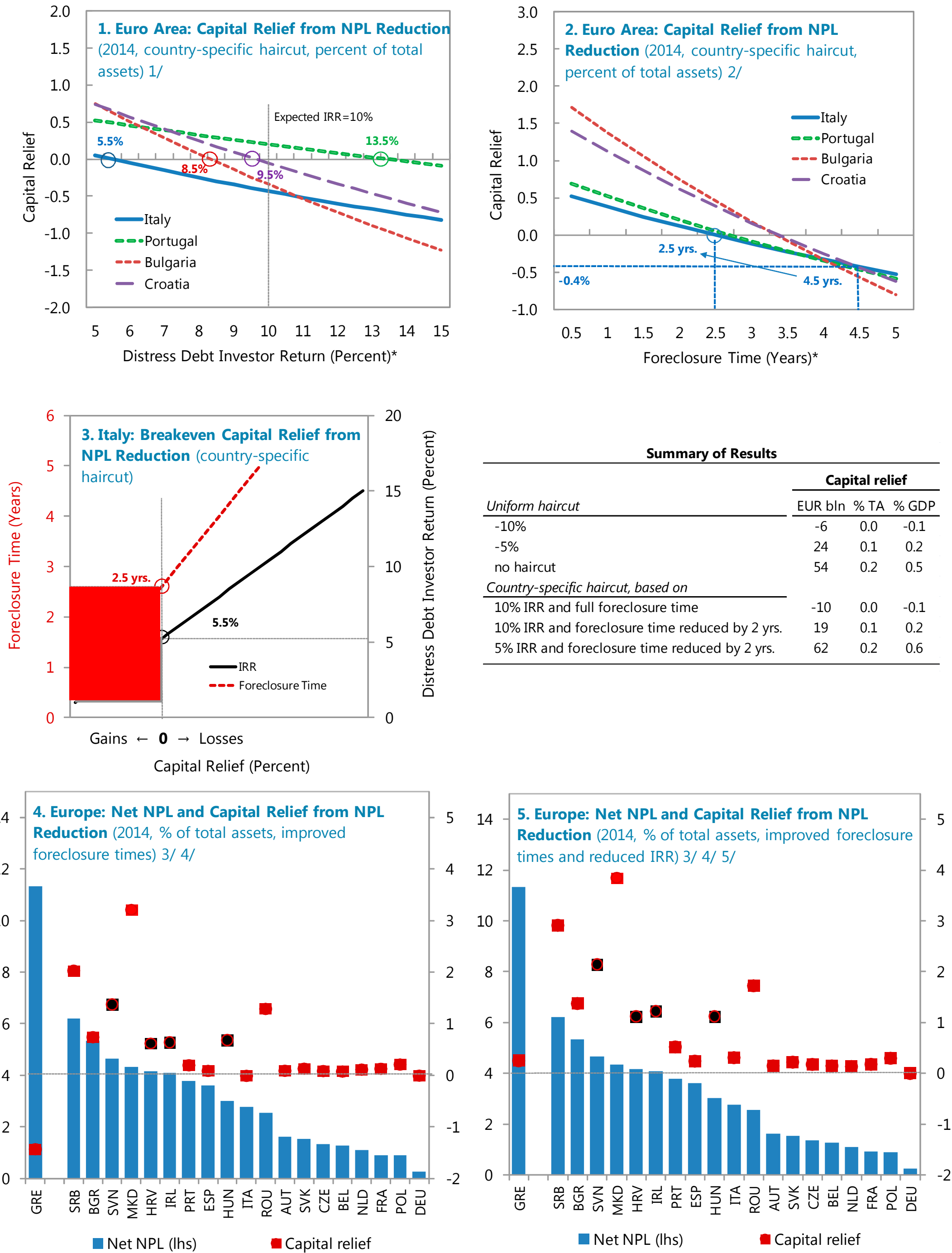
4. **Absent a pricing gap, timely disposals of NPLs—combined with structural reforms to reduce foreclosure times by strengthening debt enforcement and insolvency frameworks—can free up a large amount of regulatory capital and generate significant capacity for new lending.** For a large sample of European banks, we calculate bank-by-bank the amount of capital that would be released by removing NPLs from bank balance sheets at net book value. We assume that banks reduce their NPLs to a level consistent with historical averages (between 3 and 4 percent of gross loan book for most banks); meet a target capital adequacy ratio of 16 percent; and offer a 10 percent rate of return on investment. Importantly, for countries with elevated expected foreclosure times (Bulgaria, Croatia, Cyprus, Czech Republic, Greece, Hungary, Italy, Poland, Romania, Serbia, Slovak Republic, and Slovenia), we reduce the expected foreclosure time (ECB, 2009) by up to two years to assess the potential impact of structural reforms on the pricing gap. Under these assumptions, the aggregate capital relief would amount to €19 billion (or 0.1 percent of total assets of sample banks at end-2014) (Annex Figure V.1., chart 4). This in turn could unlock new lending of €261 billion (or almost 2.5 percent of GDP), provided that there is corresponding demand for the new loans. Serbia, Slovenia, Romania, Bulgaria, Croatia, and, to a lesser extent, Ireland and Portugal, would benefit the most under these conditions.

5. **Since the impact on capital varies significantly across countries, the additional lending capacity would range from some 39 percent of GDP in Ireland and 16 percent of GDP in Serbia to 8 percent of GDP in Bulgaria and Croatia, and 5 percent in Portugal.** In addition, reducing investors' return expectations from 10 percent to 5 percent has a powerful impact: for example, in the case of Italy, this would result in additional capital relief of almost €12 billion and about €118 billion (or 7 percent of GDP) in new lending (Figure V.1, Chart 5).[2]

6. **Without reduced asset recovery cost in some countries, potential losses from selling NPLs would exceed any capital relief.** In some countries, structural reforms and/or lower investment returns of distress debt investors are needed for external NPL resolution to have a net positive effect (see Figure V.1, charts 1 and 2). Applying observed foreclosure times and imposing a minimum (market-based) investment return of 10 percent would imply a large haircut relative to net book value in some countries, such as Greece (-29 percent), Italy (-21 percent), Bulgaria (-17 percent), Croatia (-12 percent), and Portugal (-8 percent), reducing the aggregate capital relief from NPL disposal to a negative €10 billion (or 0.1 percent of GDP of selected countries at end-2014).

[2] Note that the importance of the selling price depends on the relative scale of the NPL problem. If NPL disposals are substantial, a high haircut may jeopardize the capital adequacy of the ceding bank. Also, in certain countries, the anticipation of a greater supervisory push for NPL resolution might decrease the market price of collateral, imposing additional losses on disposal that are not captured by this calculation.

Figure V.1. Capital Relief using Country-Specific Haircuts



Summary of Results

	Capital relief		
	EUR bln	% TA	% GDP
Uniform haircut			
-10%	-6	0.0	-0.1
-5%	24	0.1	0.2
no haircut	54	0.2	0.5
Country-specific haircut, based on			
10% IRR and full foreclosure time	-10	0.0	-0.1
10% IRR and foreclosure time reduced by 2 yrs.	19	0.1	0.2
5% IRR and foreclosure time reduced by 2 yrs.	62	0.2	0.6

Sources: Bankscope; EBA; ECB; Haver Analytics; national central banks; and IMF staff calculations. Note: calculations based on bank-by-bank data from the EBA Transparency Exercise (2013), with NPLs reduced to historical average and capital adequacy ratio (CAR) of 16.0 percent. TA=total assets of sample banks. 1/ Assuming variable expected return of distressed debt investors at the following (unchanged) foreclosure times: ITA=4.5 yrs., BUL=4.0 yrs., HRV=3.5 yrs., and PRT=2.0 yrs. 2/ 1/ Assuming an expected return of distressed debt investors of 10 percent (IRR) and variable foreclosure times. 3/The results for Cyprus are not shown for formatting reasons. 4/ For the country-specific haircut, the foreclosure time is assumed to decline by up to 2 years for countries with foreclosure times longer than two years (Bulgaria, Croatia, Cyprus, Czech Republic, Greece, Hungary, Italy, Macedonia, Poland, Romania, Serbia, Slovak Republic, and Slovenia) as a result of current/potential structural reforms. 5/ Return expectations of external investors are halved, so that IRR=5 percent.

VI. IMF SURVEY ON OBSTACLES TO NPL RESOLUTION[1]

1. **Design and participants**. The *Survey on Obstacles to NPL/Distressed Debt Resolution* included two parts: (i) *country survey*, completed by country authorities and (ii) *bank survey*, completed by cross-border banking groups operating in the jurisdictions covered in the country survey. The countries that were targeted for inclusion in the survey were those where NPLs (or NPEs) exceeded 10 percent of total loans (or total assets) at any point during 2008-2014. The country survey was completed by 19 countries, including 9 euro area members (Cyprus, Greece, Ireland, Italy, Latvia, Lithuania, Portugal, Slovenia, and Spain) and 10 non-euro area countries (Albania, Bosnia and Herzegovina (from two separate jurisdictions), Croatia, Hungary, Iceland, Romania, Macedonia, Montenegro, San Marino, and Serbia). The bank survey was completed by 10 banking groups (Alpha Bank, Intesa, NBG, Piraeus, Pro Credit, Raiffeisen, Societe Generale, Unicredit, Eurobank, and Erste Group).[2]

2. **Scope of country and bank surveys**. Both surveys covered *five broad areas of potential obstacles to NPL resolution*: (i) informational obstacles; (ii) deficiencies in the insolvency and debt enforcement systems; (iii) challenges related to supervision and banks' capacity to manage NPLs; (iv) obstacles to distressed debt market development; and (v) tax and other obstacles. The country survey was the most comprehensive, collecting both qualitative views and detailed factual information on different types of obstacles, whereas the bank survey included only qualitative questions:

- *Qualitative questions* (country and bank surveys). In each of the five areas, respondents were asked to provide their views regarding the level of concern (high, medium, low/no concern or unknown) as well as their views about different aspects of the problem (e.g., the informational obstacles to NPL resolution included such aspects as the quality of public registers, availability of debt counseling and outreach, quality of supervisory reporting, consumer and data protection, and the setup of auctions). In all cases, the respondents were also asked to provide detailed comments on the nature of their concern. The *obstacle scores* for the five broad areas were constructed based on both country and bank survey and are presented in Figure VI.1 (in view of the sensitivity of this information, the country names are replaced with the "EA" and "NEA" labels that refer to "euro area" and "non-euro area" countries, respectively. For some areas, in addition to the overall obstacle scores, average scores reflecting the degree of concern about specific areas were constructed as well (see Figure VI.2).

- *Factual questions* (country survey). In addition to qualitative views, the country survey also aimed to gather factual information regarding specific obstacles to NPL resolution. Most questions were designed to highlight the presence or absence of a specific impediment, requiring a yes/no response—both questions and responses are presented in Tables VI.1-4 below. For example, in order to identify specific limitations of public registers, the survey included factual questions on

[1] Prepared by Wolfgang Bergthaler (LEG), Anna Ilyina, Dmitriy Kovtun, Pablo Lopez-Murphy (all EUR) and Dermot Monaghan (MCM), with assistance from Gilda Ordonez-Baric (EUR).

[2] The authors are grateful to the colleagues from the European Investment Bank (especially, Luca Gattini) for their help with the bank survey.

the quality of credit bureaus, limitations of the cadastral system, and deficiencies in the public asset and real estate transaction registers.[3]

3. **Broad takeaways from the IMF Survey on Obstacles to NPL/distressed debt resolution:**

- *Relative severity of obstacles by area*: legal framework and distressed debt markets are the two areas where obstacles to NPL resolution are, on average, perceived to be most severe. That said, the obstacle scores in the other three areas – information, supervisory and taxation – are not significantly lower (Figure VI.1).

- *Authorities' views vs. banks' views*: the country authorities tend to have higher degree of concern about institutional obstacles to NPL resolution than banks, suggesting that the authorities' assessments are fairly conservative. There is only one country for which the overall obstacle score based on the bank survey is above the one based on the country survey (Figure VI.1).

- *Euro area vs. non-euro area countries*: on average, the differences in perceived severity of institutional obstacles between euro area and non-euro area countries are fairly minor in the areas of information and supervision. However, in the distressed debt market, legal and tax areas, the obstacles are seen as more severe in non-euro area countries (Figure VI.1).

- In each of the five broad areas, respondents tend, on average, to be more concerned about certain institutional impediments (Figure VI.2):

    - *Information*: deficiencies in public registers are viewed as posing more serious challenge for NPL resolution than other informational obstacles;

    - *Legal framework*: the degree of concern about the overall judicial system is generally higher than the degree of concern about corporate or personal insolvency frameworks. The degree of concern about deficiencies in the insolvency frameworks (especially for households) appears to be notably higher in the non-euro area countries than in the euro area countries.

    - *Bank supervision*: collateral-related issues are of greater concern than banks' capacity to manage NPLs or banks' capitalization.

- The IMF survey-based scores are broadly consistent with similar indicators provided by other international organizations (e.g., the correlation between the IMF survey-based legal obstacle score and an average of the World Bank Doing Business (WBDB) indicators on the insolvency frameworks and contract enforcement is around 45 percent – see Figure VI.2).

- Institutional deficiencies that hamper a speedy resolution of NPLs tend to be linked. For example, Figure VI.2 shows that informational deficiencies and other institutional obstacles tend to be significantly positively correlated.

---

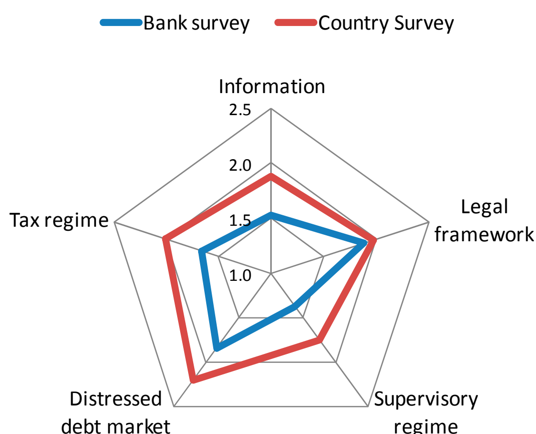
[3] As the surveys were sent in Q1 2015 and responses were received by June 2015, the responses may not capture subsequent changes.

Figure VI.1. IMF Survey-based Scores on Obstacles to NPL Resolution: by Country and Area

	Countries ("EA" = euro area; "NEA" = non-euro area)																				
	EA	NEA	NEA	EA	NEA	NEA	NEA	NEA	NEA	EA	NEA	NEA	EA	NEA	EA	NEA	EA	EA	EA	EA	Average score
Information																					
-- country survey	2.6	2.0	1.8	2.4	1.7	1.8	1.8	2.0	1.3	2.2	1.8	1.8	1.4	2.0	1.8	1.8	1.8	1.0	1.2	1.0	1.8
-- bank survey	2.5	1.5	1.7	1.9		1.5	1.7	1.9			1.7	1.3		1.4	1.1		1.0	1.0			1.5
--max (country, bank)	2.6	2.0	1.8	2.4	1.7	1.8	1.8	2.0	1.3	2.2	1.8	1.8	1.4	2.0	1.8	1.8	1.8	1.0	1.2	1.0	1.8
Legal framework																					
-- country survey	3.0	2.5	2.0	2.3	2.0	2.3	2.0	3.0	2.0	2.5	2.0	2.0	2.3		1.0	1.7	1.5	2.0	1.0	1.0	2.0
-- bank survey	2.5	1.7	2.1	2.4		1.7	2.1	2.0			2.0	1.6		1.7	1.4		1.7	1.7			1.9
--max (country, bank)	3.0	2.5	2.1	2.4	2.0	2.3	2.1	3.0	2.0	2.5	2.0	2.0	2.3	1.7	1.4	1.7	1.7	2.0	1.0	1.0	2.0
Supervisory framework																					
-- country survey	2.5	2.3	2.0	1.5	2.3	1.8	1.8	1.5	1.5	2.0	1.3	1.5	1.8	2.0	2.0	1.5	1.5	1.3	2.0	1.0	1.7
-- bank survey	1.9	1.4	1.7	1.8		1.4	1.5	1.4			1.3	1.1		1.2	1.2		1.0	1.0			1.4
--max (country, bank)	2.5	2.3	2.0	1.8	2.3	1.8	1.8	1.5	1.5	2.0	1.3	1.5	1.8	2.0	2.0	1.5	1.5	1.3	2.0	1.0	1.8
Distressed debt market																					
-- country survey	3.0	3.0	2.0		3.0	3.0	3.0	1.0	3.0	2.0	2.0		3.0	2.0	2.0	1.0		1.0	2.0	1.0	2.2
-- bank survey	2.0	1.8	2.7	2.7		1.8	1.5	2.0			2.5	2.0		1.6	1.7		1.0	1.0			1.9
--max (country, bank)	3.0	3.0	2.7	2.7	3.0	3.0	3.0	2.0	3.0	2.0	2.5	2.0	3.0	2.0	2.0	1.0	1.0	1.0	2.0	1.0	2.2
Tax regime																					
-- country survey	3.0			2.0	2.0	2.0	2.0		2.0	1.0	2.0		1.0		1.0	2.0	2.0		1.0	1.0	1.7
-- bank survey	2.5	1.6	2.8	1.3		1.6	1.5	1.8			1.3	2.3		1.2	1.3		2.0	2.0			1.8
--max (country, bank)	3.0	1.6	2.8	2.0	2.0	2.0	2.0	1.8	2.0	1.0	2.0	2.3	1.0	1.2	1.3	2.0	2.0	2.0	1.0	1.0	1.8
Overall obstacle score																					
-- country survey	2.8	2.4	2.0	2.1	2.2	2.2	2.1	1.9	2.0	1.9	1.8	1.8	1.9	2.0	1.6	1.6	1.7	1.3	1.4	1.0	1.9
-- bank survey	2.3	1.6	2.2	2.0		1.6	1.7	1.8			1.8	1.6		1.4	1.3		1.3	1.3			1.7
--avg (max (country, bank)	2.8	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.8	1.7	1.6	1.6	1.5	1.4	1.0	1.9

Notes: "EA" = euro area country; "NEA" = non-euro area country. "Country survey" refers to the survey of country authorities and "Bank survey" refers to the survey of banking groups with operations in the countries included in the country survey; "3" = High degree of concern, "2" = Medium degree of concern; "1" = no concern' "grey" =unknown or missing responses. Max (country, bank) shows the max score from country and bank survey; for the purposes of max calculations and where neither country nor bank survey responses were available, the IMF country teams' assessments were used instead (values shaded in grey).

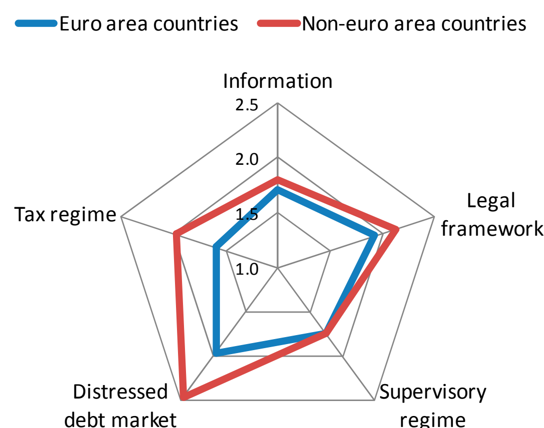
Average Scores on Obstacles to NPL Resolution: Country Survey vs. Bank Survey



Note: the scores are simple averages for the countries for which both country and bank responses were available

Source: IMF surveys of country authorities and banks.

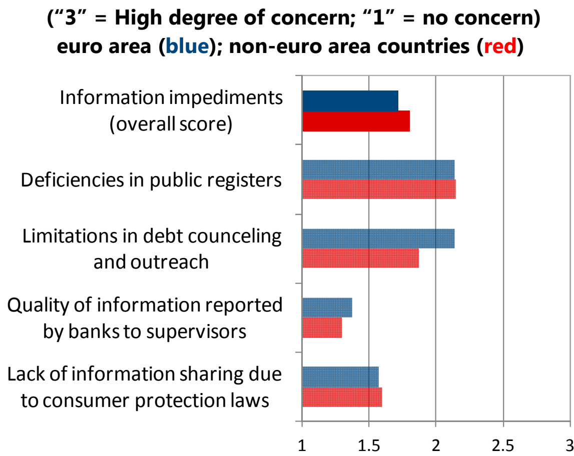
Average Scores on Obstacles to NPL Resolution: Euro Area vs. Non-euro Area Countries



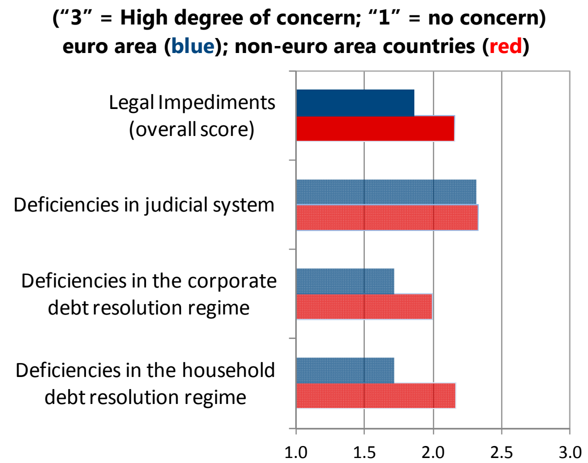
Note: the chart is based on Max (country,bank) from Table above

Figure VI.2. IMF Survey-based Scores on Obstacles to NPL Resolution: by Area

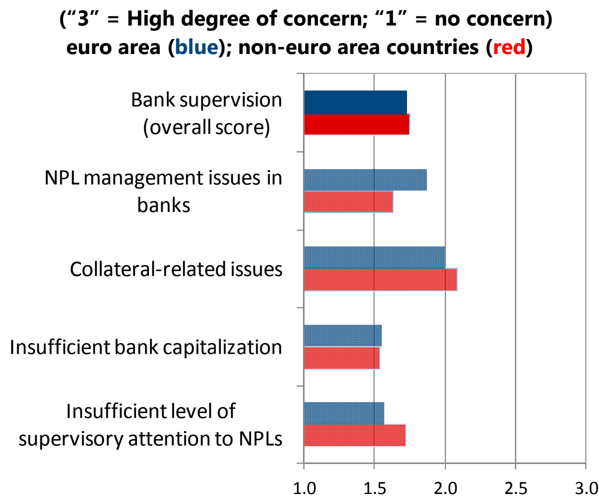
("3" = High degree of concern; "1" = no concern)
euro area (blue); non-euro area countries (red)



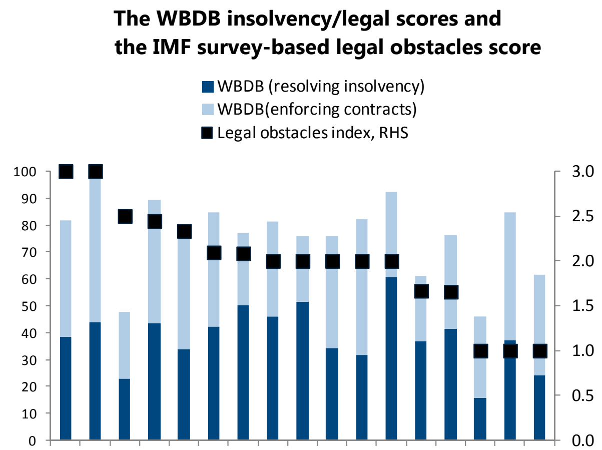
("3" = High degree of concern; "1" = no concern)
euro area (blue); non-euro area countries (red)



("3" = High degree of concern; "1" = no concern)
euro area (blue); non-euro area countries (red)

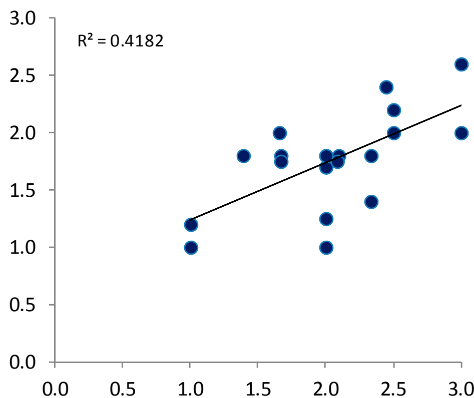


The WBDB insolvency/legal scores and the IMF survey-based legal obstacles score

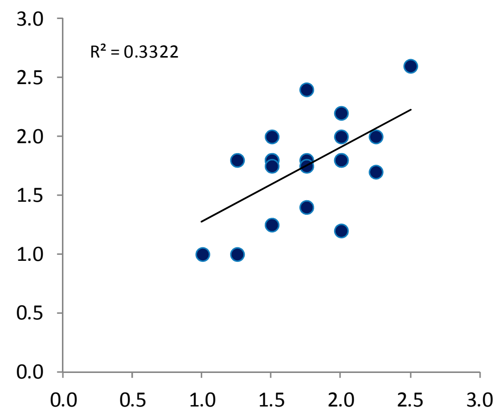


Note: the WBDB scores refer to the distance to best performers and range between 0 and 100, e.g., a score of 25 indicates that a country is 25 percentage points away from the best performer.

Correlation of Information and Legal Obstacle Scores
("3" = High degree of concern; "1" = no concern)



Correlation of Information and Supervisory Obstacle Scores
("3" = High degree of concern; "1" = no concern)



Sources: IMF Survey and World Bank Doing Business Indicators

Table VI.1. Obstacles to NPL/Distressed Debt Resolution Related to Information Availability

(in percent of respondents)

	All countries			Euro area countries			Non-euro area countries		
	NO	YES	N.A.	NO	YES	N.A.	NO	YES	N.A.
1. PUBLIC REGISTERS									
1.1 LIMITATIONS OF CREDIT BUREAUS:									
Are taxes and social security payments included?	80	20	0	78	22	0	82	18	0
Are payments to utilities companies included?	70	30	0	67	33	0	73	27	0
Is information on connected borrowers (family or business links) included?	50	40	10	33	67	0	64	18	18
Is information on trade credits included?	50	50	0	44	56	0	55	45	0
Is there credit scoring for individuals?	65	35	0	78	22	0	55	45	0
Is there credit scoring for SMEs?	55	45	0	56	44	0	55	45	0
Is there credit scoring for companies?	55	45	0	56	44	0	55	45	0
Is there a requirement on the frequency of updating the credit info?	5	90	5	0	100	0	9	82	9
Is the use of credit info systems a part of the regular process providing credit?	0	100	0	0	100	0	0	100	0
1.2. LIMITATIONS OF CADASTRAL SYSTEM									
Is it centralized? (e.g. digital/online as opposed to paper-based)?	35	60	5	22	78	0	45	45	9
Does it cost less than €10 to conduct a credit search on an individual?	10	90	0	22	78	0	0	100	0
Does it cost less than €25 to conduct a credit search on a business?	10	90	0	22	78	0	0	100	0
1.3 LIMITATIONS OF PUBLIC ASSET REGISTER									
Does it identify the owner and the asset characteristics?	10	70	20	22	67	11	0	73	27
Are the registers available to the public to conduct searches?	35	55	10	22	78	0	45	36	18
1.4 LIMITATIONS OF REAL ESTATES TRANSACTION PRICE PUBLIC REGISTERS									
Are prices of all residential real estate transactions included?	30	60	10	11	89	0	45	36	18
Are prices of all commercial real estate transactions included?	35	55	10	22	78	0	45	36	18
Is detailed description of property characteristics included?	35	55	10	33	67	0	36	45	18
Is information updated at least monthly?	30	55	15	33	56	11	27	55	18
Is the general public able to conduct searches?	50	40	10	33	56	11	64	27	9
Are the costs to conduct a search less than €10 on average?	10	60	30	0	67	33	18	55	27
2. DEBT COUNCELING AND OUTREACH									
Is there a free or subsidized personal budgeting service?	70	20	10	67	33	0	73	9	18
Is there a free or subsidized legal advice services for indebted households?	65	25	10	67	33	0	64	18	18
Is there an institution that provides credit management training/ advice for SMEs?	55	30	15	33	56	11	73	9	18
3. SUPERVISORY REPORTING									
Do banks report using EBA NPL reporting templates?	40	60	0	11	89	0	64	36	0
Are banks required to report to supervisor beyond basic EBA NPL reporting requirements?	25	75	0	11	89	0	36	64	0
4. CONSUMER AND DATA PROTECTION									
Absence of restrictions on sharing of personal info for debt workout purposes?	65	30	5	67	33	0	64	27	9
5. REAL ESTATE SALES/AUCTIONS									
Are bilateral sales permitted for repossessed assets?	15	80	5	22	78	0	9	82	9
Is information on upcoming sales/auctions publicly available?	5	90	5	11	89	0	0	91	9
Absence of any blanket bans on sales/auctions?	35	50	15	33	56	11	36	45	18

Notes: for negative responses, questions where percentage of respondents exceeded 75 percent are highlighted in red, and those between 50 and 75 percent - in yellow.

Table VI.2. Obstacles to NPL/Distressed Debt Resolution Related to Legal Framework

(in percent of respondents)

	All countries			Euro area countries			Non-euro area countries		
	NO	YES	N.A.	NO	YES	N.A.	NO	YES	N.A.
1. CORPORATE INSOLVENCY REGIME									
Is there a bankruptcy/insolvency regime (credible threat of bankruptcy)?	5	85	10	0	100	0	9	73	18
Do claims of private secured creditors have seniority over public sector claims?	25	55	20	33	44	22	18	64	18
Do private unsecured claims have priority over public sector claims?	50	30	20	56	44	0	45	18	36
Can public creditors agree to partial debt servicing?	10	65	25	11	89	0	9	45	45
Is there a process for clearance of arrears to public sector (e.g., tax, social security authorities)?	15	55	30	0	89	11	27	27	45
Is there a process for clearance of arrears to public sector linked to the private sector restructuring?	30	40	30	11	67	22	45	18	36
Are there pre-pack procedures for fast approval of debtor/creditor agreed restructuring plans?	35	45	20	33	67	0	36	27	36
Is there an out-of-court settlement mechanism?	25	55	20	22	78	0	27	36	36
Are there special in-court and out-of-court procedures for micro and small enterprises?	45	35	20	33	67	0	55	9	36
Is it possible to limit shareholders' decisions as part of business restructuring (e.g., can creditors agree to debt-to-equity conversion against the will of the shareholders)?	45	35	20	56	44	0	36	27	36
Is it possible to change the company's management in all debt restructuring procedures?	35	45	20	67	33	0	9	55	36
Can assets of a company (under debt restructuring) be sold through auctions?	15	60	25	22	78	0	9	45	45
Can assets of a company (under debt restructuring) be sold through open-market bilateral sales?	10	65	25	11	89	0	9	45	45
2. HOUSEHOLD INSOLVENCY REGIME									
Is there a bankruptcy regime (credible threat of bankruptcy) for consumers/households?	35	45	20	11	89	0	55	9	36
Are individual entrepreneurs eligible for that process (as opposed to only households)?	15	50	35	22	78	0	9	27	64
Is there an out-of-court settlement/mediation mechanism?	35	40	25	56	33	11	18	45	36
3. JUDICIAL SYSTEM									
Are there specialized courts or judges that only deal with insolvency issues?	35	60	5	56	44	0	18	73	9
Are personal insolvency related court fees/charges within a reasonable range?	40	35	25	22	67	11	55	9	36
Do insolvency administrators require professional certification?	10	80	10	11	89	0	9	73	18
Is remuneration of insolvency practitioners conditional on asset liquidation?	30	50	20	56	44	0	9	55	36
Are there set time requirements for insolvency process?	35	55	10	0	100	0	64	18	18

Notes: for negative responses, questions where percentage of respondents exceeded 75 percent are highlighted in red, and those between 50 and 75 percent - in yellow. For "N.A" responses, questions where percentage of respondents exceeded 30 percent are highlighted in grey.

Table VI.3. Obstacles to NPL/Distressed Debt Resolution Related to Supervisory Framework

(in percent of respondents)

	All countries			Euro area countries			Non-euro area countries		
	NO	YES	N.A.	NO	YES	N.A.	NO	YES	N.A.
1. BANKS									
1.1 NPL MANAGEMENT ISSUES									
Do most banks have dedicated NPL workout units or separate NPL management?	0	100	0	11	89	0	0	100	0
Are banks able to outsource NPL management (special servicers, agreements with asset managers)?	25	70	5	33	67	0	27	64	9
Are banks required to have NPL management strategies/action plans?	15	85	0	22	78	0	18	82	0
Are banks required to have operational targets for NPL reduction?	70	30	0	78	22	0	64	36	0
Is there a mechanism for interbank coordination on individual debtor cases?	45	55	0	67	33	0	27	73	0
is there a mechanism for coordination between private and public creditors on individual debtor cases?	70	25	5	78	11	11	64	36	0
Have any of the following restructuring tools been used during 2012-14:									
-interest only loans	20	55	25	22	67	11	18	45	36
-debt-to-equity swaps	40	30	30	56	22	22	27	36	36
-reducing repayments by warehousing a proportion of debt	30	45	25	44	44	11	18	45	36
-performance based write-off of a proportion of the debt	30	35	35	44	22	33	18	45	36
-other tools	35	20	45	44	22	33	27	18	55
Have any of the following mechanism of NPL disposals have been used during 2012-14:									
-portfolio sales	20	65	15	44	44	11	9	73	18
-transfer to private asset management companies	45	30	25	67	22	11	27	36	36
-transfer to public asset management companies	70	15	15	67	22	11	73	9	18
1.2 COLLATERAL AND RELATED ISSUES									
Are collateral valuations typically based on market prices (as opposed to tax or last transaction value)?	15	85	0	33	67	0	9	91	0
Is there a requirement to apply a real estate valuation standard (e.g. RICS or IVS)?1	30	65	5	33	67	0	27	64	9
1.3 CAPITAL ADEQUACY	0	0	0	0	0	0	0	0	0
Have banks been subject to granular asset quality reviews during 2012-14?	10	85	5	11	89	0	18	73	9
Have banks been able to fulfill any capital needs by tapping the private markets?	30	70	0	33	67	0	36	64	0
Have banks been forced to dispose of assets in order to deleverage?	65	35	0	44	56	0	82	18	0
Does the regulator assess the conservatism and consistency of loan loss provisions during on-site inspections?	5	95	0	22	78	0	0	100	0
2. SUPERVISORS									
Have supervisors undertaken a thematic review of banks' NPL management capacity during 2012-14?	15	80	5	22	67	11	18	82	0
Have supervisors issued formal guidelines to banks on NPL management practices?	35	65	0	22	78	0	55	45	0
Does the on-site supervision team include specialists/advisors with NPLs?	60	40	0	56	44	0	73	27	0
Have supervisors increased capital charges for NPLs?	85	15	0	89	11	0	82	18	0
Have supervisors imposed time limits on how long NPLs can be carried on banks' balance sheets?	75	25	0	89	11	0	64	36	0
Have supervisors incentivized banks to reduce reliance on collateral through increased provisioning?	50	50	0	78	22	0	27	73	0
Have supervisors incentivized banks to reduce reliance on collateral through assessment of valuation practices?	25	75	0	44	56	0	18	82	0
Is there a licensing and regulatory regime in place to enable non-banks to own or manage NPLs?	75	25	0	78	22	0	82	18	0

Notes: for negative responses, questions where percentage of respondents exceeded 75 percent are highlighted in red, and those between 50 and 75 percent - in yellow. For "N.A" responses, questions where percentage of respondents exceeded 30 percent are highlighted in grey.

Table VI.4. Obstacles to NPL/Distressed Debt Resolution Related to Distressed Debt Market, Taxation and Other Institutional or Policy Issues

(in percent of respondents)

	All countries			Euro area countries			Non-euro area countries		
	NO	YES	N.A.	NO	YES	N.A.	NO	YES	N.A.
1. MARKET FOR NPLs/DISTRESSED DEBT									
Are third party banks, including foreign banks, allowed to buy NPLs from domestic banks?	10	85	5	22	67	11	9	91	0
Are institutional investors allowed to buy NPLs from domestic banks?	10	75	15	33	56	11	0	82	18
Are foreign institutional investors allowed to buy/own NPLs?	20	70	10	33	56	11	18	73	9
Do special servicing firms operate in the country?	25	60	15	33	56	11	27	55	18
Can banks sell denounced loans (i.e., legally and economically written off)?	15	75	10	22	56	22	18	82	0
Can banks set up private asset management companies in cooperation with investment firms?	5	85	10	11	78	11	9	82	9
2 OTHER INSTITUTIONAL AND POLICY OBSTACLES									
2.1 TAXATION									
Are there tax deductions for loan loss provisioning?	20	75	5	33	56	11	18	82	0
Is there a tax loss carry forward mechanism such as a deferred tax asset?	35	65	0	22	78	0	55	45	0
Are there tax deductions for loan write-off?	60	40	0	56	44	0	73	27	0
Are there tax deductions for collateral sale?	75	25	0	78	22	0	82	18	0
Debtors are not charged capital gains taxes upon debt write-off/restructuring of their debts at more favorable terms	40	40	20	67	33	0	27	36	36
Can public creditors provide debt write-off?	75	25	0	89	11	0	64	36	0
2.2 OTHER INSTITUTIONAL OR POLICY ISSUES									
Are there blanket bans (moratoria) on foreclosures or auctions?	45	25	30	33	44	22	55	9	36
Were there any specific measures to tackle debtors that can afford to pay but choose not to?	45	25	30	44	33	22	55	9	36

Notes: for negative responses, questions where percentage of respondents exceeded 75 percent are highlighted in red, and those between 50 and 75 percent - in yellow. For "N.A" responses, questions where percentage of respondents exceeded 30 percent are highlighted in grey.

VII. INTEREST ACCRUAL ON NPLS[4]

7. **The International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) allow accrual of interest income on NPLs.** Accrual accounting assumes that income is recorded in the period earned rather than in period of the cash flow; however, interest accruals can lead to distortions of financial statements due to the following issues:

- *Interest income is recorded even though the borrower does not repay.* This practice of capitalizing interest repayments distorts interest income and associated metrics (e.g., net interest margin) since full and timely interest payments are not received.
- *NPLs increase from the accrual.* Since unpaid interest is capitalized as part of the loan balance, NPLs grow at the rate of uncollected interest. For large, seriously delinquent NPL levels, the accrual can be substantial.
- *Provision coverage loses meaning.* Since there is a matching provision to the interest accrual, the adequacy of general loan loss provisions becomes difficult to judge, which may delay management's recognition of actual loan deterioration.

8. **Remedial measures include:**

- *Improving transparency*. Require that banks disclose separately (i) the increase in NPLs due to loan deterioration (i.e., deterioration in the borrowers' ability to repay loan principal) and that which is from the accrual of interest income; (ii) the allocation of the provisions by the amount dedicated to original loan principal and that for interest accrual.
- *Adopting a sound non-accrual principle*. Interest accrual should be suspended after a certain period of time (consistent with an appropriate definition of an NPL (e.g., an impairment trigger or days past due – 90 or 180 days).
- *Charge-off/write down of uncollectible portions of NPLs*. Require prompt charge off/write down of uncollectible credits (both in terms of accrued interest and principal). To improve discipline, make such a process rules-based using passage of time from when the payments are owed and unpaid (e.g., 180 or 365 days past due). For this measure to be effective, the legal framework must ensure that the bank retains judicial title and can collect on the loan—including through loan sales—after charge-off.

[4] Prepared by Michael Moore and Novia Saca Saca (both MCM).

VIII. THE REGULATORY TREATMENT OF NPLS IN THE UNITED STATES—EARLY LOSS RECOGNITION[5]

1. **There are significant differences in the approach to recognizing loan losses through provisions between IFRS (as applied in Europe) and GAAP (as practiced in the United States).** Both apply the *incurred loss approach* (FSF, 2009), but although the accounting standards are comparable, a key difference is the regulatory requirement that overlays the accounting standard. This overlay limits the discretion that bank managers have in applying GAAP. This results in a more conservative U.S. GAAP treatment of NPLs for banks than is the case under IFRS.

2. **There are two key regulatory requirements that are imposed in the United States.** Banks must (i) suspend and reverse interest income on NPLs once the loan is 90 days past due on any payment or is deemed uncollectible in whole or in part (i.e., the non-accrual principle);[6] and (ii) promptly charge off/write down the loan balance on the bank's accounting statements to the recoverable collateral value after six months.

3. **For a charge-off, any loan balance that exceeds the recoverable value (less the cost to sell) should be charged against the loan loss reserve.** In determining the collateral value, it should be today's "spot price" with no adjustment for forecasted increase in collateral values. The act of charging-off the loan should not be confused with the forgiveness of the borrower's debt. The bank must still be judged on its ability to collect defaulted loans, including through loan sales.

4. **A nonaccrual loan may be returned to accrual status after the borrower has made a series of contractual payments.** This improvement in the borrowers' condition may arise from a modification of lending terms. However, given the concern that liberal modification leads to misstatement of loan portfolio condition, modification practices are subject to close regulatory scrutiny. There must be sound internal control processes governing any modification, and management information systems must monitor and verify that the modifications are working.

5. **The effect of this treatment is that banks will recognize credit losses sooner in a weakening credit cycle.** This aids earlier recovery (or failure if capital is insufficient), as evident in the recent crisis—though severe, system NPLs peaked at 5 percent of loans in 2009, and have since declined to less than 2 percent. The charge-off requirement removes the disincentives to bank sales of NPLs, contributing to earlier price discovery for NPLs and underlying collateral. Also tax incentives encourage early write offs since provisioned loan losses are not tax deductible.

[5] Prepared by Michael Moore and Nolvia Saca Saca (both MCM).

[6] The exception to the non-accrual treatment applies if the loan is secured and in the process of collection, i.e., legal or other action is proceeding that will result in recovery or restoration to a current status.

IX. BUILDING BLOCKS FOR EFFECTIVE ARREARS MANAGEMENT[7]

6. **Banks need to embark on a comprehensive process to manage NPLs.** During normal times, arrears management constitutes only a small fraction of a bank's activities, and is often handled on an ad-hoc basis with little or no standardization. A growing number of NPLs requires establishing policies, operational processes, skills and staffing to ensure swift workout and to prevent a further deterioration of the loan portfolio.

7. **A segmentation of the overall NPL portfolio is necessary to pursue targeted resolution strategies.** Policies and processes to be applied in managing distressed loans will depend on their characteristics. Rather than following a case-by-case approach, exposures can be segmented along common criteria, such (i) size and "vintage" of arrears, (ii) the type of exposure (e.g., mortgage vs. consumer loan) and the kind of counterparty (private individual, SME vs. corporate), and (iii) the risk inherent to a distressed loan. Segmentation can also be useful to prioritize a bank's arrears management activities, taking into account the impact on a bank's balance sheet and constrained operational resources.

8. **Restructuring policies need to foster sustainable, long-term solutions.** While forbearance measures, such as grace or interest-only periods, can help mitigate temporary cash shortages in an uncertain economic environment, they are not effective for addressing a protracted reduction in a borrower's debt servicing capacity. For each lending segment, appropriate "strategy templates" need to be developed aimed at restoring the long-term viability of a loan, or, where this is not possible, liquidating the exposure. This includes standardized methodologies to assess the current and future financial situation of a delinquent borrower.

9. **Organization and processes need to be optimized for arrears management activities.** A bank's demonstrated ability to engage sets adequate incentives for borrowers to cooperate. Quick action on early arrears can moderate further asset deterioration and allow for implementation of restructuring solutions without undue delay. To achieve this, the arrears management process will need to be standardized and industrialized in particular in those lending segments with a high number of cases. This includes the setup of specialized call centers to act as first point of contact to borrowers, teams that specialize on particular lending segments and process steps (such as early arrears, late arrears, restructuring or recovery) and teams concentrating on high-value, high-risk and high-complexity cases that require tailor-made restructuring solutions. Banks should also consider on-boarding external expertise and supplementing their operational capacity through carefully supervised outsourcing.

---

[7] Prepared by Oliver Wünsch (MCM).

10. **Technology has an important role in supporting the arrears management staff.** A bank's usual IT system lacks the relevant specialized functionality to manage large NPL portfolios, and, thus, often need to be augmented to deliver a maximum degree of automation. This includes monitoring of borrowers' performance, tools to automate the assessment of the borrower's financial situation and the adequacy of loan modifications at single loan and portfolio level, and workflow management tools to track a large number of cases while minimizing paper work.

11. **The arrears management performance needs to be continuously monitored to identify needs for adjustments to policies and processes.** Balance sheet indicators move too slowly to be effective. Instead, a set of operational (such as numbers of cases agreed with the borrower) and financial (such as cash collections) indicators is needed that allow for more immediate feedback. These indicators should allow for monitoring of performance at all levels of the organizational hierarchy, and also be used to define forward-looking targets consistent with the bank's capital planning and provisioning framework.

X. KEY RECENT REFORMS TO INSOLVENCY REGIMES IN SELECTED EUROPEAN COUNTRIES: CORPORATE INSOLVENCY LAW[8]

BULGARIA
The **2013 amendments to the insolvency regime** limit the backdating of insolvencies and clarify the rules for the set off and for avoidance of certain transactions. Specifically, the trustee or any creditor in case of failure of the trustee can bring avoidance actions and claim repayment of annulled transactions within 1 year as of opening of the start of the bankruptcy proceedings.
CROATIA
A **2012 law** introduced pre-insolvency settlement proceedings into the insolvency regime. Debtors can reach a restructuring plan with creditors which has to be approved by a judge and which may include measures such as the write-off of parts of the creditors' claims, a debt-to-equity swap, the extension of repayment period, a decrease of interest rates, changes in the security instruments, a corporate restructuring of the debtor, and the introduction of strategic partners in the shareholding structure.
CYPRUS
A voluntary out-of-court **mediation** process for financial disputes has been established under the financial Ombudsman of Cyprus. The amendments to the Companies Act in **2015** reformed the procedure for winding-up non-viable companies, notably to redefine the commencement criteria, including a company's "inability to pay" its debts, and shorten the length of the procedure. In addition, examinership was introduced to allow for reorganization of viable companies. Examinership allows for a period of protection from creditor action (initially four months) while management continues to run the business under the supervision of a court-appointed examiner. The examiner prepares a proposal for debt settlement/restructuring for the court's approval.
FRANCE
A **2012 amendment** to the insolvency regime expanded the manner in which protective measures may be used in the context of insolvency proceedings for reasons of commingling of assets, mismanagement, or the disposal of assets. A further 2012 amendment was designed to ease debt restructuring by debtors subject to bankruptcy proceedings by enabling subordination agreements amongst bondholders and making holding companies eligible for accelerated financial safeguards procedures. A **2014 amendment** significantly updated and established new insolvency proceedings. Specifically: The **pre-insolvency proceedings** (i.e., conciliation and ad hoc mandate) were amended to enhance the obligation to inform the statutory auditor and the employee works councils of pre-insolvency proceedings. The reform enables pre-packed sales of the business, amends grace periods to extend maturities to up to 2 years, grants priority to fresh money to all providers (if the plan gets approved), renders void any contractual provision that restricts the debtor's rights or increases its obligations, and designates an implementation official in charge of the implementation of the proceedings. • A new **accelerated safeguards proceeding** (*procedure de sauvegarde acceleree*) was created to encompass all creditors (different from the accelerated financial safeguards which only includes financial creditors). The

[8] This background note was prepared by Manfred Balz (external LEG expert), Wolfgang Bergthaler, Chanda DeLong, Jose M. Garrido, Amanda Kosonen, Nouria El Mehdi, and Natasha Stetsenko (all LEG). It describes selected recent insolvency reforms in EU members plus Serbia.

debtor proposed plan needs to be first approved by the requisite majority of creditors in value in a conciliation procedure. The plan must then be approved by the court within 3 months (rather than 1 month as set forth for the accelerated financial safeguards).

- The **ordinary safeguard proceedings** (*procedure de sauvegarde*) were revised to allow creditors to propose an alternative plan and the courts to call shareholders to pay their unpaid capital; enable the administrator or the creditors' committee or the public prosecutor to convert a safeguard proceeding into a reorganization if the safeguard plan is not adopted by the creditors' committees; oblige creditors' committees to disclose some information (on agreements on their vote, subordination and third party payments); and grant the administrator the possibility to convene a shareholder meeting to adopt modifications of the plan.
- Regarding the **reorganization procedure** (*procedure de redressement judiciaire*), a judicial representative may be appointed to restore shareholders' equity. In the absence of a plan, the administrator may request the court to order a partial or total transfer of the business. Payments under executory contracts are no longer permissible except in reorganization procedures.

A **law** adopted in **2015** has introduced targeted modifications to the insolvency regime, specifically:

- specialized commercial courts for insolvency cases;
- improvements in the qualifications and regime applicable to insolvency administrators;
- measures to facilitate corporate debt restructuring based on capital modifications: the law introduces the possibility of adopting capital increases and reductions (including debt-equity swaps) without the shareholders' consent, and it also recognizes the powers of the court to order a compulsory transfer of shares.

GERMANY

The protective shield proceedings—introduced into the **insolvency code in 2012**—is available only to debtors in imminent insolvency, not in actual illiquidity or insolvency, who qualify for debtor-in-possession status. The latter requires a debtor petition and absence of expected negative impact on creditors, which is evaluated by the court and a (preliminary) creditors' committee appointed by the court. The protective shield gives eligible debtors the possibility to prepare within a maximum of three months a pre-packaged restructuring plan in the opening ("interim") stage before formal commencement of insolvency proceedings under the monitoring, and with the assistance, of a mediator ("Sachwalter") and the creditors' committee. The judge may permit the debtor in this stage to create administrative claims for a subsequent formal insolvency proceeding, e.g., by fresh money borrowing. If a feasible (not manifestly inacceptable for creditors) prepackaged plan can be negotiated under the protective shield, it may be put to vote and eventually confirmed in a subsequent formal insolvency proceeding under the general provisions for voting, cram-down, and minority protection (guarantee of liquidation value for all claimants).

GREECE

A **2014 temporary law** provides for three mechanisms:

- A debtor-initiated out-of-court mechanism for small SMEs and professionals which provides for a tax benefit for banks dependent on the debt write-off granted; in addition, public creditors' claims are settled in accordance with installment schemes.
- A debtor-initiated simplified pre-pack process for large debtors which requires a 50.1% majority of creditors to approve the plan subject to court approval. Public creditors' claims are tied to restructurings under an installment scheme.
- A creditor-initiated process of special administration which enables the sale of all assets or the debtors' business by creditors subject to court supervision.

A **2015 amendment** to the **insolvency law** simplifies and strengthens the rehabilitation processes by aligning the rehabilitation processes with the 2014 temporary law, strengthening post commencement financing,

removing procedural obstacles for rehabilitation, and streamlining rehabilitation processes.

HUNGARY

In **2010**, the Hungarian Banking Association issued out-of-court **guidelines for dealing with companies in financial distress**.

2012 amendments introduced a number of changes to the insolvency regime:

- The judicial mediation program can be initiated by mutual agreement. Courts supervise the procedure and approve the final agreement.
- The composition agreements provide that they are not binding on creditors who did not register their claim within the 30-day deadline from the publication of the court's decision opening the bankruptcy proceedings and that creditors cannot enforce their claims against the debtor unless a third party subsequently initiates liquidation proceedings against the debtor and the creditor's claim is not yet time-barred.
- Special rules are applicable to bankruptcy and liquidation proceedings of companies declared exceptionally significant by the government (i.e., state-owned companies).

ITALY

A series of reforms took place between **2009 and 2015**, and a major reform is under study. There are multiple techniques that allow debt restructuring without resorting to a full insolvency process:

- Restructuring agreements, which are designed to repay the company's outstanding debt, and are supported by a limited stay of creditor actions. Restructuring agreements need to be approved by the court and by creditors representing at least 60% of the claims. An expert gives an opinion on the feasibility of the restructuring agreement. The agreement binds the approving creditors, dissenting creditors need to receive a full payment.
- Rescue plans, whose objective is to restore the company's financial equilibrium, especially in cases of illiquidity or temporary crisis. The main purpose of the legal provision is to protect the actions undertaken in a rescue plan against potential claw-back actions in a successive insolvency process.
- Restructuring agreements with financial institutions. The 2015 reform has added a new restructuring tool: the possibility of reaching an agreement with financial creditors, when a company has more than 50% of its outstanding debts with financial institutions. If a majority of 75% is reached, the remaining financial creditors will also be bound by the agreement. Non-financial creditors should be paid in full.

Formal insolvency procedures include liquidation and reorganization. Numerous reforms have sought to introduce more speed and flexibility in the reorganization process, and have also improved the regulation of the vote by creditors and the controls over the reorganization plan. The 2015 reform facilitates bids by third parties on the debtor's assets, by granting them access to information on the debtor's business. The reform also enables creditors holding 10% of the claims to file a composition proposal if the company's own proposal provides a repayment rate to unsecured claims lower than 40%.

The multiplicity of the restructuring and reorganization mechanisms has increased the importance of rules on post-petition or bridge financing that take into account the potential gaps and interruptions between procedures, ensuring the priority of the new financing and the protection of creditors against claw-back actions. Several technical amendments have addressed this point.

LATVIA

In 2009, **out-of-court restructuring guidelines** were adopted in line with the Global Principles for Multi-creditor Workouts ("INSOL Principles").

Legal protection proceedings (LLP) introduced in 2010 enable the rehabilitation of viable firms which consist of (i) expedited procedures for court approval of a rehabilitation plan negotiated between parties before filing of an insolvency petition; and (ii) in-court procedures for development of a rehabilitation plan after filing a petition but before commencement of the LPP. A legal person may petition the court to initiate LPP if it meets certain conditions. A rehabilitation plan has a length of two years, which can be extended for another two years by two-thirds of secured creditors and a simple majority of unsecured creditors, and may include different

restructuring tools including debt for equity swaps or debt forgiveness. The plan covers both secured and unsecured claims, and must be approved by two-thirds of secured creditors and a simple majority of unsecured creditors based on the outstanding principal amount, provided secured claims cannot be modified without secured creditors' consent. If the debtor fails to implement the LPP plan, the law allows for a conversion of the LPP to a bankruptcy (liquidation) proceeding. The commencement of the LPP triggers a stay on all enforcement actions.

The **2015 amendments to the Insolvency law** require the management board of a company to file for insolvency in the case where a company has not settled its debts for more than 2 months; enable creditors to join a claim brought by the administrator with third party rights; consider a creditor with claim rights against a third party secured by a pledge over the debtor's property as a secured creditor; allow the substantiation of creditors' claims by a court decision in the context of simplified court procedures. In addition, insolvency administrators are now considered as public officers.

LITHUANIA

The **2012 law** provides for restructuring of companies in financial difficulty, guidelines for the plan, liabilities and discharge of liabilities, appointment of a restructuring administrator, management of the company and its assets, conditions for approval, duration of the plan, simplified procedure, termination and closure of the plan.

POLAND

A **2015 law** significantly reforms the corporate insolvency regime to refine the bankruptcy tests (both illiquidity and balance sheet test), enable pre-packs, streamline the bankruptcy proceedings, improve the protection against fraudulent conveyances, change the priority for the distribution of proceeds, provide for specific rules for certain contracts, sale of securities with re-purchase and agreement on derivative transactions, provide for a right to cherry-pick and the inoperability of contractual provisions restricting the disposal of assets after the petition for insolvency. Class voting is permitted (but may also be conducted without classes) and a cram down is allowed. Four restructuring procedures for insolvent debtors have been introduced:

- **Arrangement Approval Proceedings** are debtor-in-possession procedures which are available if the disputed claims represent ≤ 15% of the claims. There is no stay on enforcement. The debtor collects creditors' votes in writing.
- **Accelerated Arrangement Proceedings** are available if the disputed claims represent ≤ 15% of the claims and allow the debtor in possession under the control of a supervisor who prepares a restructuring plan. A stay on execution is granted. Voting occurs at a creditors' meeting.
- **Arrangement Proceedings** are debtor-in-possession procedures which are available if the disputed claims represent +15% of the claims. The debtor benefits from a stay. The procedures are court supervised and the court may appoint an administrator. Voting occurs at a creditors' meeting.
- **Remedial Proceedings** provide for a stay of executions. Cherry-picking rights are permissible. It is not a debtor-in possession procedure but an administrator takes over the management of the debtor. Voting occurs at a creditors' meeting.

PORTUGAL

The **2011 Guidelines for the Extrajudicial Recovery of Debtors** provide guidance to achieve consensual debt restructuring in line with the INSOL Principles.

The **Special Recovery Procedure (PER)** introduced in 2012 is a fast track in-court mechanism to achieve restructuring plans. These are pre-insolvency procedures that provide for a stay on enforcement actions, a cram down of dissenting creditors, and enhanced priority financing. The 2012 amendment also removed the mandatory creditors' meetings and the period for holding a creditors' meeting, shortening the insolvency procedures. In 2015, the PER was amended to lower the majority requirements to approve the plan, enhance the priority of new money provided to the debtor, and end enforcement actions for the debtor's guarantors.

The 2012 **System for the Recovery of Undertakings (SIREVE)** facilitates out-of-court debt restructuring for SME's through mediation. Tax and social security administrations are required to participate but may opt out of the plan. SIREVE was amended in 2015 to, among other things, improve the viability diagnosis.

ROMANIA
The **2010 Corporate Debt Restructuring Guidelines** provide guidance to achieve consensual debt restructuring along the lines of the INSOL Principles. The **2014 insolvency law** significantly overhauled the insolvency regime, consolidated all insolvency related matters,and introduced ad hoc mandate proceedings (i.e., a confidential pre-insolvency debtor-in-possession procedure initiated by the debtor) and the concordat preventive (i.e., debtor initiated debtor-in-possession proceeding which includes a temporary stay and majority creditor voting) and the judicial reorganization and bankruptcy under one piece of legislation. The law introduced a number of new features: (i) limits the observation period (i.e., the period in which it is assessed whether the debtor is viable and thus can be restructured) to 12 months, (ii) introduces coordinating procedures for group companies, (iii) provides for the possibility of interim measures to safeguard the debtors' assets, (iv) introduces the 'private sector test' which encourages public creditors to negotiate their claims against the debtor in the same way as private creditors as well as informing the tax authorities of any initiation of insolvency proceedings, and (v) strengthens the protection of post-commencement financing.
SERBIA
In **2010** Serbia adopted a new corporate **insolvency law**, which, *inter alia*, introduced rules on fast track reorganizations. The **2014 amendments to the insolvency law** increased transparency of the procedures; tightened requirements with regard to the supervision and licensing to insolvency administrators; limited rights of the related parties; and provided for UNICITRAL-based rules on cross-border insolvency. In **2011** Serbia also adopted a law on **Consensual Financial Restructurings** based on the INSOL Principles. The Serbian Chamber of Commerce and Industry was assigned as an institutional mediator to administer this voluntary restructuring framework supported by the law and provide support in the negotiation process between the debtor and its creditors. The use of the framework is available to corporate debtors with two or more bank creditors.
SLOVENIA
In **2012**, out-of-court non-binding **guidelines** along the lines of the INSOL Principles were adopted. The **2013** amendments to the insolvency **law** introduced pre-insolvency restructuring proceedings for large and medium-sized firms to restructure financial claims (including secured claims) more efficiently and speedily, with a stay on creditor actions and majority voting. Important changes to reorganization procedures (compulsory settlement) were introduced, including (i) increased control of the proceeding by financial creditors, including the ability to initiate proceedings, to introduce a plan that takes precedence over the debtor's plan, and to take management control in certain cases, (ii) an absolute priority rule to ensure that if the value of equity is zero, debtor equity will be eliminated, (iii) corporate restructuring features, including debt/equity swaps and corporate spin-offs to facilitate viable firms continuing as a going concern, (iv) secured creditors are included in the compulsory settlement process and can pool collateral under a settlement plan, (v) the write-down of collateral to market value with a corresponding conversion of the now unsecured portions of collateralized loans into unsecured claims is permitted, and (vi) the process recognizes the possibility that requisite majorities of creditors can agree to reduce principal on unsecured debt, and to extend maturity and/or to reduce the interest rate for both secured and unsecured debt. The **2013 amendments** also introduced the simplified compulsory settlement as a streamlined reorganization procedure for micro and small enterprises, although with limited options for the restructuring of their debt. These changes have brought the framework closer to international best practices. In addition, the Slovenian system has adopted solutions similar to those used in other European economies, and has joined some emerging trends in this area, such as the facilitation of debt/equity swaps as a debt restructuring tool.

SPAIN
A **2013 law** created a new out-of-court procedure – the "out-of-court agreement on payments" or OCAP ("*acuerdo extrajudicial de pagos*") designed to solve the financial crises of small businesses, facilitated by a professional mediator. The process puts in place a stay on executions (up to 3 months max); public creditors are not affected.. The law was subsequently amended in 2015 to make it more effective and to be available to consumers (see below). A **2014 decree** (later codified into law) provides for a number of changes. With respect to **individual schemes of arrangement**, it allows a company to reach a pre-insolvency agreement with any one or more of its creditors, subject to strict criteria on content, that are not subject to avoidance action (or "claw back") in an insolvency proceeding. With respect to **collective refinancing agreements**, it strengthens the protection against avoidance actions and expands the scope of agreements to explicitly include reference to cancellation of debt (i.e., debt write offs) and other restructuring measures such as debt to equity swaps. Collective refinancing agreements with judicial approval can now be imposed on dissenting creditors upon reaching approval of requisite majorities, depending on the creditors involved and the type of agreement. Secured creditors can be included, subject to higher majority requirements. All new money granted in the context of the refinancing agreements are given priority for a period of two years from the entry of force of the reform. The decree allows for a stay of execution (subject to certain limitations) during the "pre-insolvency" period; public creditors are not included in the stay. **The 2014** and **2015 amendments** introduced further changes to the legal framework for business restructuring both in and out of court as follows: • In-court proceeding. The amendments eliminated the previous limitations on plan content (debt reductions of up to 50% of unsecured debt and reschedulings of up to 5 years). Now there is no limit to write downs and reschedulings can be up to 10 years. A new system of class voting has been introduced: creditors are divided into four classes based on "socioeconomic" factors: labor, public, financial, and a residual category "other", which are then further subdivided into two classes: those creditors with special privilege (security interest) and those with general privilege (priority). All ordinary creditors vote together in a separate class. A majority of 50% or 65% of ordinary creditors is required to approve the plan. • OCAP Procedure. The possible content of the plan has now been extended to encompass write downs/extensions beyond the prior limitations of a 25% write-down and a three year moratorium. Secured creditors may also be bound by the plan, and the majorities needed to reach an agreement have been amended. The procedure has been streamlined, channeled through the Commercial Registry, the notaries and the chambers of commerce, made more accessible by means of pre-designed forms/templates, and facilitated by an improved system of mediators. Consumers are also eligible (see below).

XI. KEY RECENT REFORMS TO INSOLVENCY REGIMES IN SELECTED EUROPEAN COUNTRIES: PERSONAL INSOLVENCY LAW[9]

CYPRUS	
Legal Framework	A **2015** amendment to the **Bankruptcy Law** introduced new procedures: Personal Repayment Schemes which enable debt restructuring of both secured and unsecured debt for natural persons who have a stable source of income, where possible, to keep some of their assets, including their primary residence. Repayment schemes approved by the required majorities of creditors become binding on all creditors upon confirmation by the court. The law also allows for court-imposed schemes where the court is satisfied that a scheme meets certain criteria, including that creditors do not receive less than what they would receive in a liquidation court.
Stay	A court-issued protective order stays creditor action for an initial period of 95 days while a debtor prepares a repayment scheme with the assistance of insolvency practitioners.
Simplified processes	Debt Relief Orders allow natural persons with virtually no income or assets to obtain a court-ordered discharge of up to 25,000 EUR of unsecured debts without creditor consent.
Discharge period	The discharge period is 3 years.
ESTONIA	
Legal Framework	A **2010 law** established a judicial restructuring procedure for individuals. A plan must be approved by a majority of creditors and the court. Secured creditors can realize their rights in rem separately.
Stay	The debtor may petition for a stay of all enforcement actions.
Discharge period	The payment period is 3-5 years.
GREECE	
Legal Framework	A **2010** law—which was amended in **2012**—introduced three processes, namely, a voluntary mediation process, a repayment plan (which must be approved by a majority of creditors), and a judicial settlement (which enables a court imposed agreement. The 2010 law was further amended in **2015** to streamline the process, clarify certain provisions related to minimum living expenses, and include public creditors' claims as dischargeable debt.
Stay	The debtor may petition for a stay of all enforcement actions.
Discharge period	The discharge period is 3-5 years.
HUNGARY	
Legal Framework	A **2015 law** establishes a personal insolvency regime and provides for a mandatory out-of-court debt settlement procedure (which must be approved by all creditors), an in-court debt settlement procedure which is mediated by a family administrator (and must be approved by the simple majority of creditors and the court), and a judicial debt settlement procedure (which enables a court imposed agreement.
Stay	The debtor may petition for a stay of all enforcement actions.

[9] This background note was prepared by Wolfgang Bergthaler, Chanda DeLong, Jose M. Garrido, Amanda Kosonen, and Nouria El Mehdi (all LEG). It describes recent insolvency reforms in selected EU members.

Discharge period	The discharge period is 5 years.
IRELAND	
Legal Framework	Ireland enacted a new Personal Insolvency **Act** in **2012** which introduced new procedures, namely (i) a Debt Settlement Arrangement, which if approved by 65% of the creditors in terms of value of the claims, provides for the settlement of unsecured debt over 5 years; and (ii) a Personal Insolvency Arrangement for debtors who are cash flow insolvent to settle secured debt up to €3 million (or more if agreed with creditors) and unsecured debt over 6-7 years which may be used once and if approved by 65% of all creditors as well as more than 50% of secured creditors and 50% of unsecured creditors. In 2015, a judicial review of creditor rejected Personal Insolvency Arrangement was introduced which may overwrite creditors' objections.
Stay	The court may grant a debtor a protective certificate against creditor enforcement actions for 70 days (extendible).
Simplified processes	Debt Relief Notice allowing for the discharge after 3 years of unsecured debt up to €20,000 for persons with essentially no income or assets which was raised to €35,000 in 2015.
Discharge period	The discharge period is 3 years.
ITALY	
Legal Framework	The **2012** law established a new framework for personal over-indebtedness. A restructuring proposal needs to be approved by the court if accepted by creditors representing 70% of the value of the debt.
Stay	The court imposes a moratorium of 120 days on creditor enforcement actions against the debtor's assets. The debtor's restructuring proposal may request a moratorium on payments of up to one year if certain conditions are met.
Discharge period	A discharge may be granted a debtor at the end of a liquidation procedure under certain circumstances.
LATVIA	
Legal Framework	A **2010 law** establishes a new insolvency framework for individuals. The law introduced a procedure under which a repayment plan closely monitored by the court is implemented in cases where individual debtors are not able to reach a voluntary agreement with creditors. The process entails bankruptcy proceedings including liquidation of the nonexempt assets of a debtor, followed by an obligation settlement procedure which entails a court approved repayment plan.
Stay	The commencement of personal insolvency proceedings stays collection and enforcement actions by creditors.
Discharge period	The discharge period is between 1 to 3.5 years.
LITHUANIA	
Legal Framework	The **2013 law** establishes a procedure for natural persons to file a restructuring plan that must be approved by the creditors, sanctioned by the court and implemented by the administrator. The law also provides for a "fast track" option where a plan and the bankruptcy petition are filed together and the court decides which to proceed with.
Stay	A general stay applies to claims by all creditors during the proceedings.
Discharge period	The discharge period is 5 years.
POLAND	
Legal Framework	The **2009 law** permits individuals to file for personal bankruptcy. The procedures focus on liquidation rather than restructuring procedures for individuals.
Stay	The law provides for a stay on creditor action against the debtor relating to claims which are

	dealt with in the bankruptcy proceedings.
Discharge period	The debtor may request a discharge after 5 years.
ROMANIA	
Legal Framework	The **2015** personal insolvency **law** introduced procedures namely the debt repayment plan and the asset liquidation (which can also be requested by creditors). It also establishes (regional and central) administrative committees for processes before the court adjudication in order to screen cases for judicial processes.
Stay	The law provides for a stay.
Simplified processes	There is a simplified insolvency procedure (for debtors who have lost 50% of the work capacity or are eligible for retirement).
Discharge period	The discharge period is 3-5 years dependent on the pay-out dividend.
SPAIN	
Legal Framework	In **2015**, Spain introduced a system to deal with the insolvency of individuals (both consumers and entrepreneurs). The system consists of two mandatory, consecutive stages: one out of court (the "OCAP" procedure) with a view to reaching a plan and, if unsuccessful, an in-court bankruptcy liquidation. After the liquidation proceeding, the debtor may apply to receive an immediate yet provisional discharge. This discharge affects (i) all outstanding unsecured and subordinated claims, with the *exception of public claims and alimonies* and (ii) the part of secured claims that remains unpaid following execution of the collateral. All non-discharged claims (*except public claims*) are then subject to a payment plan that lasts up to five years. A final discharge is generally granted upon compliance with the payment plan, but may be revoked for up five years if various types of fraud are discovered.
Stay	There is a stay on executions (up to 3 months max).
Discharge period	An immediate but provisional discharge is granted, subject to compliance with a payment plan for non-discharged claims (except for public claims) that can last *up to* 5 years. Final discharge is generally granted upon compliance with the payment plan, but can be revoked up to five years after the provisional discharge if various types of fraud are discovered.

XII. TREATMENT OF PUBLIC CREDITORS' CLAIMS IN CORPORATE DEBT RESTRUCTURING AND INSOLVENCY[10]

1. **In general, the participation of all creditors, including public creditors (such as tax and social security authorities) makes corporate debt restructuring more effective.** The treatment of public creditors' claims ranges from granting them super-priorities in some countries to detailed guidance on how these creditors may take part in out-of-court debt restructuring or outright prohibition of participation in debt restructurings in other countries.

2. **Despite the absence of clear guidance from international best practice in this area, there are several general principles that should be considered.** Recommendations 187 and 188 of the UNCITRAL *Legislative Guide on Insolvency Law* (UNCITRAL, 2005) recommends that priorities be "minimized", especially, "priorities over secured claims." The World Bank's *Principles for Effective Insolvency and Creditor Rights Systems* (2005) state that "public interests generally should not be given precedence over private rights (Principle 12A)." The IMF's *Orderly and Effective Insolvency Procedures* state that "the privilege [related to tax claims] has been justified on the grounds that giving the government priority with respect to tax claims can be beneficial to the rehabilitation process in that it gives the tax authorities an incentive to delay the collection of taxes from a troubled company (IMF, 1999, p. 49)."

- *Ranking*. Super-priorities (i.e., ranking ahead of secured creditors) may negatively affect secured credit and should be avoided. Specifically, (i) priorities (e.g., ahead of unsecured creditors) should be limited to the tax claims within a specified period of time (e.g., last 12 or 24 months), (ii) interest and penalties should be treated as unsecured (or be subordinated) claim, with only principal enjoying preferential treatment, or (iii) VAT and employee withholding taxes may be ranked preferentially (e.g., ahead of unsecured creditors).

- *Restructuring*. Subject to clear and predictable criteria, public claims (including principal) would ideally be restructured like any private claim. Consideration should be given as to whether and how this can be affected within the constitutional and legal framework in those countries which require an explicit legal basis for the tax administration to engage in debt restructuring. Information sharing between private and public creditors should be enhanced through, for instance, a credit register.

- *Guidance*. Clear and predictable guidance on how and under what conditions tax officials can participate in debt restructuring and insolvency would facilitate good faith application (which should shield tax officials from personal liability) subject to safeguards against fraud. Task forces of specialists (within the tax administration) could be established to deal with distressed businesses with tax liabilities. To the extent such guidelines are not advisable, due to the inexperience or lack of capacity of the tax administration, a certain degree of automaticity in debt restructuring could be envisaged.

[10] Prepared by Wolfgang Bergthaler and Jose M. Garrido (both LEG).

XIII. CORPORATE LAW OBSTACLES TO REORGANIZATION AND RESTRUCTURING OF FIRMS[1]

1. **The conflicts between insolvency law and company law extend to a wide range of issues.** National company laws in EU Member States reflect the principles of the EU Directives, and in particular, the Second Company Law Directive, which includes two fundamental principles (i) the competence of the shareholders' meeting to take decisions regarding any changes to the capital[2] and (ii) the right for shareholders to acquire new shares issued by the company (i.e., pre-emption rights). These principles, however, are not absolute, and there are exceptions to their application.

2. **Insolvency requires reconsidering the normal functioning of company law rules**. Company law is based on the assumption that the shareholders are the ultimate owners of the company, or, in economic terms, the residual claimants of the company. However, when the company is insolvent, their economic interests give way to claims that cannot be satisfied in full with the company's existing assets (such as secured or unsecured creditors).

3. **The complete preservation of shareholder rights may hinder the effective restructuring of insolvent firms.** If shareholders preserve their decision power over capital alterations, or if they retain their right to acquire shares in a capital increase, it may be impossible to implement a reorganization plan based on a debt/equity swap, or on a successive decrease and increase of capital. This, in turn, may lead to situations where creditors are forced to make concessions to shareholders, even when those concessions are not justified on economic grounds.

4. **There is room to address these challenges in national company laws consistent with EU Directives to support effective reorganization, as demonstrated by reforms implemented in several EU members.** For instance, Germany's 2012 reform of the insolvency law allows reorganization plans to include debt/equity swaps that wipe out existing shareholders, provided that (i) shareholders are not worse off under the reorganization plan than in liquidation of the company and (ii) the reorganization plan is approved with the majorities and complies with procedures required by the insolvency law. Equally, the 2013 Slovenian insolvency law amendment as well as the 2015 reforms to the Italian and French insolvency regimes permit debt/equity swaps without the consent of the existing shareholders.

[1] Prepared by Wolfgang Bergthaler and Jose M. Garrido (both LEG).

[2] Changes to the distressed company's capital structure represent a very effective technique to reorganize companies. Capital modifications such as debt/equity swaps allow companies to reduce their debt and afford creditors the opportunity to take an interest in the reorganized company, with the possibility of receiving future profits or of disposing of their shares in the market.

XIV. COMPARATIVE ANALYSIS OF SELECTED EUROPEAN AND INTERNATIONAL AMC INITIATIVES

AMC	Country	Type	Legal Setup, Ownership, Expected Life	Mandate & Management 1/	NPL Ratio, Govt. Debt/GDP,GDP Growth2/	Absolute and Relative Transaction Size 3/				Capital Structure & Main Funding Sources (bn)	Main Asset Types and Transfer Criteria	Transfer Oblig.	Transfer Price & Profit Sharing	Special Powers
						bn	% GDP	% Assets	% of NPL					
Europe														
Securum, Dec. 1992	Sweden	Centralized; Nordbanken, Gota	Public 100%; SEK24bn; 10-15 years	Narrow, independent	NPL ratio: n/a Debt/GDP:47% GDP(t): -1.2% GDP(t+1): -0.1%	SEK67 gross (at set-up)	4.5%	4.4%	n/a	33% equity and govt. funding	Complex corporate and Real estate loans	Yes	At net book value; No profit sharing	No
NAMA , Dec. 2009	Ireland	Centralized	Semi-private €100mn; 51% private, 49% public; 10 years	Broad, independent (but strong guidance)	NPL ratio: 9.8% Debt/GDP: 43% GDP(t):-6.4% GDP(t+1): -1.2%	€74 gross; €32 net	37.7%	5%	n/r	0.3% equity, 5% sub bond, 95% senior, govt guaranteed, bought by banks	Real estate loans, most developers, ABS	Yes	Avg. 57% discount to nominal value; valued at long term economic value	No
SAREB, Dec. 2012	Spain	Centralized	Semi-private; €1.2bn; 55% private, 45% public ; 15 years	Narrow, mixed management	NPL ratio: 6% Debt/GDP: 69% GDP(t): -2.1% GDP(t+1): -1.6%	€108 gross; €51 net	9.3%	3%	77%	2.2% equity, 6.5% (€3.6) sub, 91.4% (€50.8) senior, mainly govt guaranteed	Real Estate loans and assets; price based selection	No	Discount by asset category from 32.4% to 79.5%; Avg. 53%; no profit sharing	No
BAMC, Feb. 2013	Slovenia	Centralized	Public 100%;; €204mn; 10 years	Narrow, independent (own/third-party asset mgtm.)	NPL ratio: 13.3% Debt/GDP: 53% GDP(t):-1% GDP(t+1): 0.6%	€4.5 gross; €1.5 net	13%	8.9%	87%	17% equity, 83% (€1.0) senior govt. guaranteed	Complex Corporate and Real Estate assets	Yes	Avg. discount of 65%; valued at "Real long term value"; no profit sharing	No
SNB StabFund, Nov. 2008	Switzer-land	Decentralized; UBS	SPV, 100% SNB; \$5.5bn repurchase option paid in as equity by UBS	Narrow, mixed mgtm.	NPL ratio: 0.9% Debt/GDP: 53 % GDP(t): 2.2% GDP(t+1): 0.3%	\$39.4gross; \$38.7 net	8.3%	1.1%	n/r	14% equity, plus Funding lines SNB 90%, UBS 10%	Illiquid ABS portfolio to stabilize UBS, depressed prices	No	2% below book value; First \$1bn profit to SNB, 50%-50% split thereafter	No
EAA, Dec. 2009	Germany	Decentralized; West LB	Public, 100% Government & NRW state; €3.1bn; 18 years	Narrow, independent mgtm.	NPL ratio: 2.9% Debt/GDP: 65% GDP(t):-5.6% GDP(t+1): 1.7%	€178 net NPL and performing	7.5%	2.2%	n/r	2% equity, govt.-guaranteed bonds and notes	Illiquid Real Estate loans and ABS, depressed prices	Yes	Net book value; No profit sharing	No
KKR/AM HI, 2015	Italy	Decentralized; UCG/ISP	Private	Narrow	NPL ratio: 16.5% Debt/GDP:132% GDP: 0.5% GDP(t+1): 1.1%	\$2 test phase	tbd							
International														
Danaharta, June 1998	Malaysia	Centralized	Public, 100% government, RM 3.0bn; 6.5 years	Narrow, independent management, (own/third-party asset mgtm.)	NPL ratio: 18.6% Debt/GDP: 32% GDP(t): -7.4% GDP(t+1): 0.5%	RM20 gross; RM 9 net	5.1%	4.2%	n/a	20% (RM3.0) equity, 80% (RM 11.1bn) Government guaranteed bonds	Selectively Corporate and Real estate loans	No, but regulatory "carrot and stick" incentives	Participating banks retained the right to get 80% of any recoveries in excess of acquisition costs	Yes, restruc-turing/ foreclo-sure powers
KAMCO, Sept. 1998	Korea	Centralized	Semi-private, 43% govt, 29% KDB and banks; SPV, 5 years	Narrow, independent mgtm. via JVs	NPL ratio: 7.4% Debt/GDP: 10% GDP(t):-5.5% GDP(t+1): 0.2%	KRW110 face value, KRW39.8 net	12%	13.8%	n/a	SPV funding: KRW 21.6tn bonds, of which 20.5 govt.-guaranteed	Selectively Corporate and Real estate loans	No, at bank request	45% of collateral value for secured loans and 3% on unsecured loans, avg. 35% of nominal	No
Maiden Lane LLC, II & III, 2008	USA	Decentralized, Bear Sterns; AIG	Semi-private; SPV (LLCs); 6-10 years	Narrow, independent mgtm.	NPL ratio: 1.3% Debt/GDP: 64% GDP(t):-0.3% GDP(t+1): 2.6%	\$79.8 net (30.0/20.5/ 29.3)	0.6%	0.8%	n/r	Thin equity structures, mainly funded by NY Federal Reserve	Portfolios picked to stabilize institutions	No	Net book value, structuring of first loss pieces, profit sharing with originating entity	No

Sources: Bloomberg L.P., Consensus Economics, European Commission Annual Macro-Economic Database, U.S. Federal Reserve, Haver, IMF (FSI, GFSR, WEO), company information, and broker reports. Note: 1/ narrow=financial objective only, broad=additional elements, such as contribution to economic recovery or employment; 2/ NPL ratio and sovereign indebtedness at end of previous year (t-1), realized real GDP growth (t), one-year ahead real GDP growth expectation in the month after set-up of AMC (t+1), n/a = not available, n/r = not relevant or suitable for comparison; 3/ GDP, banking assets and NPL volumes as of transaction date (or end-2014).

References

Abiad, Abdul, Dell'Ariccia, Giovanni and Bin Li, 2011, "Creditless Recoveries," IMF Working Paper No. 11/58 (Washington, D.C.: International Monetary Fund).

Bending, Tim, Markus Berndt, Frank Betz, Philippe Brutscher, Oskar Nelvin, Debora Revoltella, Tomas Slacik and Marcin Wolski, 2014, "Unlocking Lending in Europe," Working Paper, Economics Department (Luxembourg: European Investment Bank).

Bijsterbosch, Martin and Tatjana Dahlhaus, 2011, "Determinants of Credit-less Recoveries," Working Paper Series No. 1358, June (Frankfurt/M.: European Central Bank), available at https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1358.pdf?d93534044d95cb69fbdb4d9a02cb3671.

De Bock, Reinout and Alexander Demyanets, 2012, "Bank Asset Quality in Emerging Markets: Determinants and Spillovers," IMF Working Paper No. 12/71 (Washington, D.C.: International Monetary Fund).

Espinoza, Raphael and Ananthakrishnan Prasad, 2010, "Nonperforming Loans in the GCC Banking System and Their Macroeconomic Effects," IMF Working Paper No. 10/244 (Washington, D.C.: International Monetary Fund).

European Banking Coordination ("Vienna") Initiative", 2012, Report of the Working Group on NPLs in Central, Eastern and Southeastern Europe, available at https://www.imf.org/external/region/eur/pdf/2012/030112.pdf.

European Central Bank, 2009. *Housing Finance in the Euro Area*. Structural Issues Report, March (Frankfurt/M.: European Central Bank), p. 37, available at https://www.ecb.europa.eu/pub/pdf/other/housingfinanceeuroarea0309en.pdf.

European Banking Authority, 2014, EBA Final Draft Implementing Technical Standards on Supervisory reporting on forbearance and non-performing exposures under article 99(4) of Regulation (EU) No 575/2013.

Franks, Julian R. and Oren Sussman, 2000, "Resolving Financial Distress By Way of a Contract: An Empirical Study of Small UK Companies," mimeo, presented at the Tuck Contemporary Governance Conference, November 12, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=236098.

Gilson, Stuart C., John Kose and Larry H. P. Lang, 1990, "Troubled Debt Restructurings: An Empirical Study of Private Reorganization of Firms in Default," *Journal of Financial Economics*, Vol. 21, pp. 315-53.

Heisz, Andrew and Sébastien LaRochelle-Côté, 2004, "Corporate Financial Leverage in Canadian Manufacturing: Consequences for Employment and Inventories," *Canadian Journal of Administrative Sciences*, Vol. 21, Issue 2, pp. 111–28.

Hoggarth, Glenn, Sorensen, Steffen and Lea Zicchino, 2005, "Stress Tests of UK Banks using a VAR Approach," Working Paper 282 (London: Bank of England).

Hulster, Katia, Salomao-Garcia, Valeria and Raquel Letelier, 2014, "Loan Classification and Provisioning: Current Practices in 26 ECA countries," Working paper, August, p.11 (Washington, D.C.: World Bank), available at http://documents.worldbank.org/curated/en/2014/08/20453047/loan-classification-provisioning-current-practices-26-eca-countries-overview-paper.

International Monetary Fund (IMF), 2006. *Financial Soundness Indicators Compilation Guide.* March (Washington, D.C.: International Monetary Fund).

__________, 1999. *Orderly & Effective Insolvency Procedures—Key Issues*. Legal Department (Washington, D.C.: International Monetary Fund), available at http://www.imf.org/external/pubs/ft/orderly/index.htm.

Inaba, Nobuo, Takashi Kozu, Toshitaka Sekine and Takashi Nagahata, 2005, "Non-performing Loans and the Real Economy: Japan's Experience," BIS Working Paper No. 22, April (Basel, Bank for International Settlements).

Kannan, Prakash, 2010, "Credit Conditions and Recoveries from Recessions Associated with Financial Crises," IMF Working Paper No. 10/83 (Washington, D.C.: International Monetary Fund).

Kashyap, Anil, Owen A. Lamont and Jeremy Stein, 1994. "Credit Conditions and the Cyclical Behavior of Inventories," *Quarterly Journal of Economics*, Vol. 109, No. 3, pp. 565-92.

Klein, Nir, 2014, "Small and Medium Size Enterprises, Credit Supply Shocks, and Economic Recovery in Europe," IMF Working Paper No. 14/98 (Washington, D.C.: International Monetary Fund).

__________, 2013, Non-Performing Loans in CESEE: Determinants and Impact on Macroeconomic Performance, IMF Working Paper No. 13/72 (Washington, D.C.: International Monetary Fund).

Kroszner, Randall S., Luc Laeven and Daniela Klingebiel, 2007, "Banking Crises, Financial Dependence, and Growth," *Journal of Financial Economics*, Vol. 84, No. 1, pp. 187-228.

Mako, William P., 2005, "Chapter 4: Emerging-Market Crisis Applications for Out-of-Court Workouts—Lessons from East Asia, 1998-2001," in: Pomerleano, Michael and William Shaw (eds.) *Corporate Restructuring: Lessons from Experience* (Washington, D.C.: World Bank), pp. 99-120.

Nkusu, Mwanza, 2011, "Nonperforming Loans and Macrofinancial Vulnerabilities in Advanced Economies," IMF Working Paper No. 11/161 (Washington, D.C.: International Monetary Fund).

Rajan, Raghuram and Luigi Zingales, 1998, "Financial Dependence and Growth," *American Economic Review*, Vol. 88, pp. 559-86.

Sharpe, Steven A., 1994, "Financial Market Imperfections, Firm Leverage, and the Cyclicality of Employment," *American Economic Review*, Vol. 84, No. 4, pp. 1060-74.

United Nations Commission on International Trade Law (UNCITRAL), 2004. *Legislative Guide on Insolvency Law* (New York: United Nations), available at https://www.uncitral.org/pdf/english/texts/insolven/05-80722_Ebook.pdf.

World Bank, 2005. *Principles for Effective Insolvency and Creditor Rights Systems* (updated draft). (Washington, D.C.: World Bank), available at http://www.worldbank.org/ifa/FINAL-ICRPrinciples-March2009.pdf.